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Report No. 8556

PROJECT COMPLETION REPORT

KOREA

**AGRICULTURAL WHOLESALE MARKETING PROJECT
(LOAN 2111-KO)**

APRIL 23, 1990

**Agriculture Operations Division
Country Department II
Asia Regional Office**

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ABBREVIATIONS

AFD	-	Agriculture and Fishery Development Corporation
BCI	-	Bureau of Commerce and Industry
DAE	-	Division of Agricultural Economics
EPB	-	Economic Planning Board
GAMA	-	Garag-dong Agricultural Market Authority
ICB	-	International Competitive Bidding
KDI	-	Korea Development Institute
KREI	-	Korea Rural Economics Institute
LCB	-	Local Competitive Bidding
MAF	-	Ministry of Agriculture and Fisheries
MCO	-	Market Construction Office
MOF	-	Ministry of Finance
NACF	-	National Agricultural Cooperative Federation
NFFC	-	National Federation of Fishery Cooperatives
OCE	-	Office of Construction and Engineering
OED	-	Operations Evaluation Department
PCR	-	Project Completion Report
SCD	-	Second Construction Division
SMG	-	Seoul Metropolitan Government
TCD	-	Third Construction Division
VAT	-	Value added tax

FISCAL YEAR

January 1 - December 31

Office of Director-General
Operations Evaluation

April 23, 1990

MEMORANDUM TO THE EXECUTIVE DIRECTORS AND THE PRESIDENT

SUBJECT: Project Completion Report on Korea
Agricultural Wholesale Marketing Project (Loan 2111-K0)

Attached, for information, is a copy of a report entitled "Project Completion Report on Korea: Agricultural Wholesale Marketing Project (Loan 2111-K0)" prepared by the Borrower with an Overview prepared by the Asia Regional Office. No audit of this project has been made by the Operations Evaluation Department at this time.

A handwritten signature in black ink, appearing to be 'E. Han', is written over a faint rectangular box.

Attachment

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MAPS: IBRD 15838R1
15843R2
15846R

KOREA

AGRICULTURAL WHOLESALE MARKETING PROJECT
(Loan 2111-KO)

PROJECT COMPLETION REPORT

Preface

This is the Project Completion Report (PCR) of the Agricultural Wholesale Marketing Project for which Loan 2111-KO was approved on March 25, 1982, in the amount of US\$50.0 million. The Loan was closed on schedule on June 30, 1985 and US\$19.39 million was cancelled.

The PCR was prepared by Seoul Metropolitan Government (Part A) and the Ministry of Agriculture and Fisheries (Part B). The Asia Regional staff prepared the Overview and Evaluation Summary based, inter alia, on the Staff Appraisal Report; the President's Report; the Loan Agreement; supervision reports; and various project-related Bank files.

This PCR was read by the Operations Evaluation Department (OED). The draft report was sent to the Borrower for comments on February 16, 1990, for comments by April 6, 1990, but none were received.

PROJECT COMPLETION REPORT

KOREA: AGRICULTURAL WHOLESALE MARKETING PROJECT (LN. 2111-KO)

BASIC DATA SHEET

KEY PROJECT DATA

	<u>Appraisal Estimates</u>	<u>Actual or Est. Actual</u>	<u>Actual as % of Appraised Estimate</u>
Total Project Cost US \$ Million	101.25	71.4	70.52%
Loan Amount \$ Million	50.00	30.61	61.23%
Date Physical Components Completed	6/84	6/85	
Proportion Completed by that Date (%)	100	100	
Economic Rate of Return %	25	13.5	
Financial Performance		Weak	
Institutional Performance		Satisfactory	
Cost of Funds - Current (%)	11.6	22.6	
Deflated Cost of Funds (%)	N.A.	16.8	

**STAFF INPUT
(Staffweeks)**

	<u>FY77</u>	<u>FY78</u>	<u>FY79</u>	<u>FY80</u>	<u>FY81</u>	<u>FY82</u>	<u>FY83</u>	<u>FY84</u>	<u>FY85</u>	<u>FY86</u>	<u>FY87</u>	<u>TOTAL</u>
Preappraisal	35.1	37.8	178.3	9.6	27.8							288.6
Appraisal					41.3	36.3						77.5
Negotiation						6.1						6.1
Supervision						4.6	14.9	18.8	4.7	.6	1.4	37.0
Other		.2	.1		.3	1.6			.5			2.7
Total	35.1	38.0	178.4	9.6	69.4	48.8	14.9	18.8	5.1	.6	1.4	412.0

CUMULATIVE DISBURSEMENTS

	<u>FY82</u>	<u>FY83</u>	<u>FY84</u>	<u>FY85</u>	<u>FY86</u>
Appraisal Estimate (US\$ M)	1.7	15.4	43.6	50.0	
Actual (US\$ M)	0	9.0	17.9	29.2	30.6
Actual as % of Estimate	0	58.4	41.2	58.5	

Date of Final Loan Disbursement: January 10, 1986

PROJECT DATES

Actual

Negotiations	February 11, 1982
Board Approval	March 25, 1982
Loan Agreement	May 4, 1982
Loan Effectiveness	August 6, 1982
Loan Closing Date	June 30, 1985

MISSION DATA

		<u>Dates</u>	<u>No. of Weeks</u>	<u>No. of Persons</u>	<u>Staff-Weeks</u>	<u>Date of Report</u>
Reconnaissance	FAO/CP	11/76	4	3	12	12/13/76
Preparation	FAO/CP	4/77	2.5-6	7	28	6/10/77
Preparation	FAO/CP	10/77	3	N.A.	N.A.	12/02/77
Preparation	IBRD	3/78	1.5	3	4.5	3/30/78
Preparation	IBRD	7/78	2.5-6	6	32	7/31/78
Preappraisal	IBRD	10/78	N.A.	11	N.A.	11/16/78
Preappraisal	IBRD	2/79	2	1	2	4/19/79
Preappraisal	IBRD	2/80	1	2	2	N.A.
Preappraisal	IBRD	5/80	1.5	2	3	5/23/80
Appraisal	IBRD	5/81	N.A.	8	N.A.	3/1/82
Total					83.5+	
Supervision 1		6/82	2	3	6	7/30/82
Supervision 2		11/82	1	4	4	2/09/83
Supervision 3		4/83	1.5	2	3	5/02/83
Supervision 4		11/83	2	1	2	1/10/84
Supervision 5		12/84	2	3	6	1/30/85
Total					21	

OTHER PROJECT DATA

Borrower:	Government of Korea
Executing Agency:	Seoul Metropolitan Government (SMG)
Fiscal Year of Borrower:	January 1 - December 31
Name of Currency:	Korean Won (W)
Currency Exchange Rate:	
Appraisal Year Average (1981)	US\$ 1.00 = Won 681
Intervening Years Average (1982-84)	US\$ 1.00 = Won 771
Completion Year Average (1985)	US\$ 1.00 = Won 870
Follow-up Project:	None

PROJECT COMPLETION REPORT

KOREA

AGRICULTURAL WHOLESALE MARKETING PROJECT (Loan 2111-KO)

EVALUATION SUMMARY

Introduction

i. The Agricultural Wholesale Marketing Project was financed under Loan 2111-KO, approved in 1982. The project aimed at improving the efficiency of agricultural marketing by initially building a new wholesale market in Seoul. Total project costs were estimated at US\$102.0 million, against which an IBRD Loan of US\$50.0 million was negotiated. It was expected that the project would be completed by June 30, 1984 and the Loan would close on June 30, 1985.

ii. Rapidly rising consumer incomes have prompted significant changes and improvements in the Korean diet over the past two decades. These changes and improvements include increased consumption of better quality fruits and vegetables and marine products. At the same time, the concentration of population in the capital city of Seoul and the relative affluence of the Seoul population compared with the remainder of the country has prompted an even higher growth in Seoul consumption rates when compared with the country as a whole as well as posing an increasing burden on the distribution system for the above products.

iii. Implementation began in late 1982 after a short delay. All physical facilities were completed. A large, relatively efficient market was built which serves the needs of Seoul's affluent population. Because of an over-estimation of project investment costs, about US\$10.7 million was cancelled.

Objectives

iv. The overall objective of the project was to promote increased efficiency in the marketing system for fruits, vegetables and marine products, particularly for the Seoul area which consumes proportionately more of these products than other areas of the country; through closing down the illegal Yongsan wholesale market and putting a modern new market for the first time under the management of the government. The specific objectives of the project included:

- (a) Promotion of a more competitive price formation mechanism through provision of adequate auction facilities, reduction of intra-market congestion, creation of a market authority to foster fair and competitive trade practices and improvement of the marketing information systems;

- (b) Increasing the efficiency of the agricultural marketing system throughout the country in general and Seoul in particular by establishing of a new market in a sufficiently competitive atmosphere and with a throughput large enough to have a significant impact on price formation throughout the country, shortening the marketing chain by establishing consignment wholesale companies to act as receiving agencies for primary producers and by enabling institutional buyers and retailer groups to purchase directly from the auction floor, reducing buyers' need to inspect the entire merchandise by promoting adoption of standardized grading, packaging and weights, reducing intramarket spoilage by providing adequate storage facilities and reducing delivery and collection costs by locating the market in the outskirts of the city.
- (c) Establishment of a basis for improving public policies and institutions affecting agricultural marketing by a study of trading practices, licensing policies, marketing legislation, tax legislation, produce assembling systems, distribution channels and cost structure and various marketing support services including transportation, credit and storage.

Project Rationale

v. From the late 1960s to 1980, the Korean marketing system underwent rapid change. In the 1960s there was a low level of surpluses over farmer-home consumption needs, most food was consumed where it was produce and the primary marketing channels consisted of country assembler/shippers who also provided production credit. By the late 1970s most farmers were commercial rather than subsistence oriented and the majority of produce was shipped directly to wholesale markets in urban areas either by individual farmers or through cooperatives.

vi. Prior to the construction of the Karak-dong market, fruits and vegetables and marine products marketing needs for the city of Seoul were served by two public wholesale markets, 14 quasi-wholesale markets and four NACF (National Agricultural Cooperative Federation) marketing centers for fruits and vegetables; and one public wholesale market, four quasi-wholesale markets and two NFFC (National Federation of Fisheries Cooperatives) marketing centers for marine products. The public wholesale markets were licensed by the Seoul City Government (SCG), the cooperative markets by the Ministry of Agriculture and the quasi-wholesale markets were either licensed retail (not wholesale) food markets or unlicensed facilities. The quasi-wholesalers accounted for 60-70% of total wholesale transactions.

vii. The "quasi-wholesaler" is an institution that is perhaps unique to Korea. Quasi-wholesale markets refer to markets which are authorized by the Law of Marketing as retail markets or which in some cases are not authorized by any laws or regulations but which regardless of their essentially illegal status perform agricultural product wholesaling functions.

viii. Market facilities at Yongsan and other quasi-wholesale markets and at the authorized wholesale markets were generally inadequate, primitive and poorly maintained. Rate of spoilage averaged at least 15%. The only generally available source of market information consisted of dealer experience and individual telephone surveys. The wholesale markets in general were increasingly unable to cope with the demand for fresh fruits and vegetables and marine products by consumers in the Seoul municipality. While Seoul accommodates 25% of the total Korean population, Seoul residents account for about 40% of total personal income and purchase 50% of the fruit marketed in Korea.

ix. Some 2,288,000 metric tons of fruits and vegetables and 390,00 mt of marine products were marketed in Seoul in 1978. In 1970 there were only two supermarkets in the entire country. By 1980 there were 330 supermarkets in Seoul alone. (By 1989 there were more than 1,000 supermarkets in Seoul, with an additional 10 major department stores which featured high-quality fresh produce sections in their food retailing premises). Legal wholesale and cooperative markets handled 28% of the total wholesale trade in fruits and vegetables and 60% of the marine products in 1980. Quasi-wholesalers handled 72% of total fruit and vegetable wholesale trade and 40% of total marine products. In 1980 65% of all fruits and vegetables were marketed through the Yongsan quasi-wholesale market, 20% through the Cheongryangri market and 15% through other wholesale markets. The Noryangjin wholesale market handled 38% of total marine products, Cheongryangri 14%, Yongsan 11%, and other markets 37%.

x. Per capita consumption of fruits grew from 6.6 kg in 1962 to 18.6 kg in 1977. By 1988, per capita fruit consumption had increased to 31 kg. Vegetable per capita consumption increased from 41.8 kg to 93.4 kg between 1962 and 1977. Total national production of fruits and vegetables in 1962 was 150,000 mt and 1.2 million mt respectively. By 1976 this had grown to 615,000 mt and 3.2 million mt.

xi. Marketing of fruits and vegetables in 1980, when the planning of the Karak-dong market was in full swing, was still characterized by extreme seasonal price variations. The gross margin between farmgate and consumer prices averaged about 47%. Most produce coming into the wholesale markets was upgraded, badly sorted and improperly packaged. The sparse market news that was available was based on bewildering variety of non-uniform weights, measures, grades and sizes. Quasi-wholesale market commissions averaged 8-9%. Spoilage at central wholesale markets was about 15% overall.

xii. The Yongsan quasi-wholesale market, which accounted for substantially more than half of the fruit and vegetables marketed in Seoul, was located in a heavily populated and congested area. Average turnaround time for trucks bringing produce into the market was about seven to 10 hours. Roads leading into and out of the market and to primary retail distribution points were inadequate and heavily traveled.

xiii. The companies that were licensed by the SCG to operate both the authorized wholesale markets and the retail markets which became quasi-wholesale markets, including Yongsan, were more interested in collecting rents than in facilitating an efficient marketing system. The main reason for the control by the quasi-wholesale markets of a major share of the wholesale market volumes was the fact that since their markets were only licensed for retail sales of food products, the shippers, wholesalers and jobbers operating in the quasi-wholesale market not only escaped the normal taxes levied on these businesses as well as almost all of the red tape that burdened the licensed wholesalers in the authorized wholesale markets, but could also levy higher marketing margins. As a consequence, the quasi-wholesalers could offer a much higher volume of credit to shippers. Thus credit availability was the main determinant of which markets received the higher volume of trade.

xiv. The cooperative marketing centers and authorized wholesale markets attempted to sell produce and marine products by auction. This was not always possible due to variations in quality and packaging, but the majority was sold at auction. In the quasi-wholesale markets sales were made through negotiation.

xv. One of the primary benefits anticipated by the Korea government in planning for the Karak-dong market was that it would make it possible to close down the Yongsan market as well as other, less important quasi-wholesale markets at the same time increase the efficiency of the total marketing system. The auction system was to be implemented for all produce sold in the new market to increase pricing efficiency.

Implementation Experience

xvi. The project planning stage lasted from 1976 to early 1982. Discussions between the ROK government and the Bank on measures to improve agricultural marketing initially started in late 1976. A total of 10 reconnaissance, preparation, preappraisal and appraisal missions were fielded by the Bank prior to the actual approval of the Loan.

xvii. The primary reasons for the large number of missions required and the attendant time lag between initial discussions and actual project implementation appear to have been the frequent changes in both Korean government personnel concerned and the many shifts in emphasis that this occasioned; and the numerous basic disagreements between the various IBRD mission personnel and Republic of Korea (ROK) officials as to the design of the project.

xviii. Progress of project implementation following the Loan Agreement until early 1987 is covered in the attached PCR. The following paragraphs should help clarify the development of the market from the time it was opened for business in 1986 until mid-1989.

xix. It should be noted that from the start there was a basic difference in concept toward financial operations of the market between the ROK government and the Bank -- a difference that was perhaps not fully

appreciated by the Bank personnel involved in planning, appraising and approving the Loan. This difference relates to the degree to which the government should provide and pay for public marketing facilities. The Loan Agreement incorporated a covenant requiring the generation of sufficient revenues from market rents, fees and other charges to cover the market's operating costs, depreciation and loan repayments. Despite this provision, the basic philosophy of the Korean government as represented by the Seoul City Government (SCG) and the Ministry of Agriculture appears to be that market facilities represent public infrastructure and as such, should be provided at government expense. Fees and charges are set at a level that will defray operating expenses and interest but does not cover amortization.

Table 1: 1988 Receipts and Expenditures, SAMACO

<u>Income</u>	<u>Billion Won</u>
Market user fees	2.458
Rentals	2.808
Administration and maintenance fees	<u>2.671</u>
Total	7.937
<u>Expenses</u>	
Operations	2.271
Interest	2.045
Other	<u>2.425</u>
Total expenses	6.741

xx. The market was projected to reach full capacity within five years from start-up. Estimated throughput was to be 3,030 mt of fruits and vegetables (640 fruit, 2,390 vegetables) per day; plus 540 mt marine products. All produce was to be auctioned. The market was planned to accommodate four fruit and vegetable wholesaling companies with 48 vegetable jobbers and 28 fruit jobbers each plus four auctioneers. The fisheries market was planned for two wholesalers and 100 jobbers.

xxi. In 1987, the first full year of operation, total daily throughput amounted to 3,378 mt. Total 1988 throughput averaged 3,767 mt per day. This official figure probably considerably understates the actual market volume since many of the jobbers do not report all of their transactions. The market accounts for more than 40% of the total Seoul daily supply of fruits and vegetables.

xxii. The market actually reached full capacity shortly after the first year of operation. This was due to the large number of firms and individuals that wanted to participate in the market. The market became a source of political patronage with everyone who had political contacts and wanted into the market able to force his way in through political pressure. Since the number of authorized wholesale companies was fixed, the market

authorities were therefore forced to accommodate more than five times the planned number of jobbers. At least 50% of the present jobbers act in fact as wholesalers. The situation is further complicated by the fact that representatives of the same companies, or families, often are members of a wholesale company, are jobbers and also retailers in the market. At the present time, although about 20% of the original jobbers have been forced out by excessive competition, there are nine authorized wholesale companies, 1,400 middlemen or jobbers, 30 dealers and 2,000 retailers operating in the market.

xxiii. For the first two years of market operation, many of the middlemen were forced to operate from temporary stalls in the parking lots due to lack of space. Sufficient accommodations have since been provided to adequately house all of the middlemen.

xxiv. The market is visited by 40,000 vehicles per day including 20,000 personal cars and 1,500 large produce trucks. About 120,000 people pass through the market each day. The original plan did not include housing for retailers. The market when first planned was located in a remote area of the city, with few people in the surrounding area. By the time construction was completed, however, the Karak-dong area was becoming a heavily populated bedroom community for Seoul, with the development of thousands of condominium apartments accelerated by the completion nearby of the Olympic Village and Olympic sports facilities. Newly affluent Seoul residents acquired automobiles as well as a taste for fresh fruits, vegetables and marine products. The huge parking lot at the Karak-dong market made it easy for car-owning consumers to shop there.

xxv. As a result, very soon after the market opened there was an influx of retailers who set up shop on the sidewalks and spaces in front of the jobber stalls. Bowing to reality, the market authority by the end of 1986 had constructed a building to house "direct sales" which is a euphemism for retailing. At the present time retailers account for about half of the total business enterprises in the market.

xxvi. Despite the original plan to auction all products passing through the market, only about 60% of the total fruits and less than 10% of the vegetables are actually sold at auction. The reason for this is the continuing lack of grading, standardization and suitable packaging. Some 80-90% of the total marine products marketed are auctioned.

xxvii. In addition to the facilities originally planned for the market, there has been a continuous expansion almost since the market opened to serve the needs of participants, suppliers and consumers. The first direct sale market building, consisting of 18,000 sq meters with a total of 1,600 retail spaces, was completed in December 1986. In May 1988 an additional building was constructed to separate the remaining jobbers from the wholesalers. A dried pepper market was opened in May 1987. The garlic market went on-stream in December 1987. A second dried fish market was built in 1988. Also in 1988 a meat market with facilities for slaughtering 350 cattle and 1,000 hogs per day was opened, which presently accounts for

30% of the total Seoul meat supply. A number of other new facilities are on the drawing board. A park-like area planted with 90,000 trees has also been developed.

Market Structure

xxviii. The management of the market is entrusted to a public corporation, the Seoul Agricultural and Marine Products Wholesale Market Management Corporation (SAMACO). The jobbers who are allied with each of the authorized wholesaler companies are organized into separate jobber associations. These in turn are organized into an overall Jobber's Federation which deals with the management corporation on matters of concern to market participants.

xxix. SAMACO employs a total of 259 people. There are 555 separate enterprises operating in the market. These employ 2,423 workers.

xxx. Labor is unionized in the Karak-dong market. The growing general labor unrest in Korea has not bypassed the market.. There are increasing demands by Karak-dong labor unions for higher pay and better working conditions.

xxxi. The wholesale companies pay SAMACO a user fee amounting to 0.5% of total transactions. Jobbers pay no user fees, although they pay a proportionate share for utilities, cleaning and maintenance. The retailers pay guarantee money, or "key money", (this is a Korean commercial custom, with the guarantee money kept in an interest bearing accounts with interest accruing to the landlord until such time as the tenant ceases to occupy the premises, when the guarantee money is returned to the tenant) of one million won for each retail space, plus W 100,000 per month for utilities and maintenance. The various related markets, service stations, bank, etc., pay a flat rental fee to SAMACO.

Project Results

xxxii. The project has provided large, functional, less congested facilities which have made it possible to more adequately meet the demands of the increasingly affluent Seoul population for better quality fruits, vegetables and marine products. It has improved the movement of produce in and out of the market as well as promoting greater efficiency of intra-market operations. It has also greatly improved the marketing information situation vis-a-vis farmers and shippers throughout the nation.

xxxiii. It has not, however, significantly reduced total food marketing margins nor has it succeeded in appreciably reducing consumer food prices, although it may have succeeded in raising farmer prices to a limited extent. The market also has not been able to influence the marketing system to the extent anticipated nor has it led to appreciable improvements in country grading, sorting and packaging of fruits and vegetables except to a limited degree.

xxxiv. The Karak-dong market project has produced mixed results. It has provided a massive, clean and sanitary modern facility through which almost half of the total fruits, vegetables and marine products consumed in Seoul are marketed. Without this facility or one like it, it is highly doubtful that the city's marketing facilities could satisfactorily meet the demands of Seoul's 10-million population.

xxxv. This is the first wholesale market operated directly by the government (through a public corporation). Government management has cut down considerably on unfair trading practices, collusion and other adverse practices that in the past characterized both authorized public wholesale markets and the quasi-wholesale markets.

xxxvi. The chaotic conditions and congestion that characterized the Yongsan market have been eliminated. Turnaround time for trucks bringing produce into the Karak-dong market averages three hours, compared with the previous seven to ten hours at Yongsan. The market is readily accessible from the major arteries that serve as transport links between production areas and Seoul city. Spoilage in the market has been reduced by at least 20% from Yongsan market levels.

xxxvii. A higher percentage of fruits and marine products are auctioned than under the former quasi-wholesaler dominated system. This means on the whole, a more open and fairer pricing function.

xxxviii. Access to market information has been greatly improved, compared to the almost total lack of price and supply information except on the part of experienced dealers at the Yongsan market. At the present time, price and volume information is collected continuously by SAMACO and transmitted through radio, newspapers, television and other media, throughout the nation. This price information is utilized by farmers nationwide in their negotiations with shippers, as well as by middlemen at all levels of the marketing chain.

xxxix. The development of the Karak-dong market has given further impetus and is serving as a model for the development of similar wholesale markets in other areas. The ROK government plans to establish three additional markets in Seoul, in the northern, eastern and western quadrants of the city, and nine markets in other major urban areas. Three municipal wholesale markets have already been established outside of Seoul. Ground should be broken for the first of these three additional Seoul City wholesale markets by the end of 1989. The major reasons for the delay in establishing the three additional Seoul markets has been the skyrocketing price of real estate, which has priced the most desirable locations outside the reach of the SCG.

xxxx. Given the general development patterns in Seoul, it is questionable whether a single market site as large as Karak-dong represents the most efficient means of distributing produce to the city, as compared to a number of smaller markets dispersed throughout the metropolitan area.

xxxxi. Official wholesale margins have been reduced somewhat from the 8-9% prevailing in the former quasi-wholesale markets, to a maximum of 6.6% for fruit and vegetable wholesalers and 5.0% for marine products dealers at Karak-dong. It is difficult to determine whether total margins have actually decreased, however. The Karak-dong jobbers, or middlemen also charge a commission of 4.0% for fruits and vegetables and 3.0% for marine products.

xxxxi. Marketing margins for fruits and vegetables averaged about 47% from farmgate to consumer prior to the opening of the Karak-dong market. It is doubtful that these margins have been significantly reduced, particularly since retail margins for fruits and vegetables still average 20% to 30% depending on the particular commodity.

xxxiii. Although Korean incomes have doubled in real terms since 1983, the percentages of income spent on food has remained about the same, at approximately 25%, since the beginning of the current decade. This is another indication that improvements in the marketing system have not appreciably reduced marketing margins.

xxxiv. While the original market development plan called for auctioning of all products in the new market, this has not been realized, particularly in the case of vegetables. The primary reason is the lack of adequate grades and standards, poor sorting and inadequate packaging at country origin points.

xxxv. The physical facilities at the Karak-dong market are modern and well-planned to promote maximum efficiency. The use of these facilities, however, is far from efficient. Most movement of produce within the market is handled manually. There is very little mechanization or automation. Produce is auctioned one box at a time with no volume transactions. It is questionable whether the market can continue to operate in this inefficient, labor intensive mode for very much longer, given the current rapid increase in Korean wages and salaries.

xxxvi. There has been continual intramural squabbling in the market, between the cooperative wholesale companies and the private companies, among the various jobbers and dealers, among wholesalers, jobbers and retailers and between all of the above user groups and the management company. This has been a continuing source of anxiety to the SCG and the Ministry of Agriculture. Most of the problems stem from the excess number of participants allowed into the market due to political influence at start-up.

xxxvii. The construction of the market and the allocation of space to market participants became a source of major financial irregularities. This has contributed to the conviction and jailing of several senior officials and/or their relatives from the previous administration and is a source of considerable embarrassment to the present administration. Anyone in a position of authority over the market is very reluctant to discuss market affairs with outsiders as a result of the ongoing scandals that are still being uncovered.

xxxviii. The market is not operating as planned, with the anticipated clearcut distinctions between wholesale companies and jobbers. There remains considerable overlap with the jobbers in many cases also functioning as wholesalers. A totally unforeseen element was the necessity of admitting retailers to the market--these now make up about half of the total market participants.

ii. Have the original objectives been achieved? The first objective, that of promoting more competitive price formation, has been almost completed met. Intra-market congestion has been reduced, a market authority was created to foster fair and competitive trade practices and the marketing information system has been greatly improved. Adequate auctioning facilities have been provided although they are not fully utilized due to the problems mentioned above. Having said all this, it should also be recognized, however, that the market has not resulting in significantly lowering marketing margins. The pricing competition occurs within the wholesale sector.

i. The efficiency of the agricultural marketing system throughout the country in general and Seoul in particular has been improved. The new market has been established in a sufficiently competitive atmosphere and with a throughput large enough to have a significant impact on price formation throughout the country. The marketing chain has not been appreciably shortened, however and institutional buyers and retailer groups are still unable in the majority of cases to buy directly from the auction floor, except in the case of marine products. The market has been unable to effectively promote adoption of standardized grading, packaging and weights. It has, however, reduced intramarket spoilage by providing adequate storage facilities and reducing delivery and collection costs by locating the market in the outskirts of the city, except that these outskirts have now become a major population center.

ii. It is difficult to determine how effectively the third objective has been met, that of establishing a basis for improving public policies and institutions through conducting various marketing-related studies. While there has been some improvement in policies and institutions relating to agricultural marketing, the system as it presently operates is still seriously flawed.

iii. An immediate objective, that of closing down the Yongsan quasi-wholesale market, was achieved with the opening of Karak-dong. The full economic benefits expected from devoting the former market space to a higher-value retail consumer electronics market similar to Akihibara in Japan have not materialized, however, with only part of the available space taken up by electronics retailers.

Lessons Learned

liii. The major liability during the project planning and design stage was the failure of the various IBRD staff and consultants concerned to adequately recognize the existing marketing environment and systems in

Korea and the strength of those systems; nor was adequate attention paid to the attitudes and sensibilities of the ROK government. As a result, the project has not produced the changes in the marketing system that were originally contemplated.

liv. Several important lessons derived from the Karak-dong market project may be applied by the Bank to future such endeavors elsewhere.

lv. First, during the planning stages insufficient account was taken of the already existing marketing environment and systems in Korea nor of the government philosophy towards establishment of public markets. This started with the original FAO/IBRD prefeasibility study in 1977. The FAO team refused to recognize the importance of these existing systems and their cultural base, and as a result the FAO team and their counterparts from Korea Development Institute (KDI) by the end of the study were not speaking to each other. At one point the head of the FAO team attempted to have the counterpart Bureau Chief in the Ministry of Agriculture fired. The FAO team and the KDI counterpart team submitted separate, conflicting reports at the conclusion of the study. These basic misunderstandings between the foreign and Korean parties went on throughout the preparation and design of the project.

lvi. Insufficient attention was given during the conceptualization and planning stages to the human element, i.e., no sociological or socio-political analyses were attempted -- rather, the project planning by the IBRD representatives was based solely on economic and technical considerations which failed to take into account the existing cultural, social, political and business/marketing environment in which the market was to function. As a result the objective of reforming the basic marketing system was never fully realized.

lvii. The shift in population growth in the Seoul area, which was already beginning to manifest itself during the final planning stages for the market, was not taken into account. This might or might not have affected the final form of the market if fully recognized.

lviii. In summary, the project plan and design was based on theoretical and technical considerations which were probably quite sound. The planners and designers failed to take into account, however, the realities of the Korean environment which were to impact significantly on the operations of the market itself and on the hoped-for changes in the marketing systems and institutions.

PROJECT COMPLETION REPORT

KOREA

AGRICULTURAL WHOLESALE MARKETING PROJECT (Loan 2111-KO)

OVERVIEW

1. Seoul Metropolitan Government (SMG) and the Ministry of Agriculture and Fisheries (MAF) have submitted Project Completion Reports for their respective parts of the project. The division has reviewed the reports and summarized the highlights of the project in the following Overview.

Introduction

2. At the request of the Government of Korea, the Bank assisted in financing the Agricultural Wholesale Marketing Project (Loan 2111-KO) which aimed at improving the marketing of fruit, vegetables and fish. The project was to provide for the construction of a modern wholesale market in Seoul, the establishment of an authority to operate it, training programs for officials and traders, improvement of market information services and a study of the entire marketing system in Korea. It was to be the first step in the Government's long term plan to increase the efficiency of the agricultural marketing system to the benefit of consumers and producers. The Loan and Project Agreements were signed on May 4, 1982 and became effective on August 6, 1982.

Project Identification, Preparation and Appraisal

3. Discussions between the Government and the Bank on measures to improve agricultural marketing started in late 1976. For the next two years, the Government efforts were directed to the preparation of a project involving a wide range of components, notably slaughter houses, cold storage facilities, refrigerated trucks, and an agricultural marketing center in the vicinity of Seoul. Towards the end of 1978, the Government decided to focus on the most urgent problem of improving the marketing situation in Seoul by constructing a modern wholesale market for horticultural and marine products. The subsequent period starting in early 1979 was devoted to the collection and analysis of basic data on the status of agricultural marketing in Seoul, followed by the preparation of detailed engineering designs which were completed in March 1981. Korea Development Institute (KDI) and the FAO/CP were involved during the early stages of the project preparation, with SMG and Korea Rural Economics Institute (KREI) taking over responsibility for project preparation in the later stages. Frequent changes of Government officials contributed to some delay in processing the project. The project was appraised by the Bank in May 1981.

4. The principal features of the project were:

- (a) construction of the Karag-dong agricultural wholesale market in Seoul consisting of a fruit and vegetable market, a fish market, a related item market and retail stores, cold storage facilities, an administration building and utility facilities;
- (b) construction of about 3.5 km of market-related roads, including an underpass, intramarket streets and parking facilities;
- (c) establishment of the Karag-dong Agricultural Market Authority;
- (d) a study of Korea's agricultural market system; and
- (e) provision of local and overseas training.

5. The following points were discussed during Negotiations, recorded in the Minutes, and reflected in the Loan and Project Agreements:

- (a) The term of the loan would be 14 years including a 3-year grace period to help accommodate (i) the longer than normal grace period required by the Borrower in the Korea Technology Development Project and (ii) the market authority's reduced earnings on security deposits due to lower interest rates.
- (b) The estimated cost of consulting services for the market studies was reduced to US\$1.0 million after review of recent experience with rates for such services performed by local consultants. The Bank's negotiating team emphasized the need for timely appropriation of funds for the market studies.
- (c) SMG would not be required to appoint an outside consultant to supervise construction of the market since the Office of Construction and Engineering (OCE), responsible for construction, had an ample number of experienced staff capable of carrying out this function. SMG might employ such a consultant if it considered it necessary.

Implementation

6. The main civil works contract was awarded to a Korean firm in April 1982 following ICB. The contract amount for the Bank-assisted portion was W 32.897 billion (US\$45.4 million); the contract included construction of the meat market (W 1.56 billion (US\$2.3 million)) which was being financed wholly from Korean sources. By the time the contract was awarded, a substantial amount of preparatory work had been carried out. With a contract period of 24 months, construction was expected to be completed by April 1984. Delays in construction were encountered due to extensive changes in the sizes of piles as a result of test pile driving, unexpected difficulties in bringing the precast concrete plant into operation, problems with procurement of materials and reduced budget for

local funds. None of these problems were major, but the cumulative effect was to delay completion of the market to April 1985 and opening to August 1985. The construction delays called for postponing the various steps in establishment and staffing of GAMA and for closing the existing Yongsan market; the Loan and Project Agreements were amended in 1983 postponing by six months the plan of action for closure of the Yongsan Market, the appointment of an Advisory Committee for GAMA, submission of the GAMA rules, articles, and market fee structure, the appointment of key GAMA staff, and establishment of GAMA.

7. The market studies were divided into three packages. Package 1 consisted of preliminary studies carried out by KREI and financed from local funds. Package 2 consisted of studies carried out by a foreign consulting firm and overseas study tours and was to be financed from the Loan. Package 3 was covered by the contract between MAF and KREI and included all the local costs associated with the studies; it was to be financed from local funds. A consulting firm was selected for Package 2 and a contract with an estimated cost of US\$500,000 was negotiated. The Government later approved a local currency budget to cover the interest and commitment charge on the loan funds used for Package 2 which limited its total cost of US\$300,000. KREI's experience with the consultants, however, was not particularly favorable in that three experts were contracted and only two stayed for the duration of their contracts.

8. The PCR estimates the total project costs at W 57.1 billion (US\$73.7 million /1) as compared to the appraisal estimate of W 69.9 billion (US\$102.0), a cost saving of 18% in Won terms or 38% in US\$ terms. The project benefitted from the slow down in construction work in the Middle East, which led to keen competition among Korean contractors. Instead of the major contract for construction of the market costing W 35.9 billion (US\$52 million) as estimated at appraisal, it was awarded for W 32.9 billion (US\$45.4 million). During the course of implementation, domestic inflation was brought under control; whereas price escalation of 14%, 11% and 10% had been projected for the period 1982 to 1984, the Wholesale Price Index showed a 4.7% increase for 1982, 0.2% for 1983 and 0.7% for 1984.

9. Disbursements lagged behind appraisal estimates throughout the implementation period, running from 48 to 58% of the SAR estimates until January 1985, when US\$18.7 million was cancelled from the loan. SMG had requested an increase in the disbursement rate for Category 1, which the Bank had turned down in 1983 on the grounds that such an increase would put the Bank's participation higher than 49%, the estimated foreign exchange component. SMG requested cancellation of US\$10.7 million in January 1984 to which the Bank withheld agreement until MOF confirmed that local funds were available for completing the project. In August, SMG requested cancellation of an additional US\$8.0 million and in September 1984, the Bank agreed to cancel US\$18.7 million of the loan. The final allocation of proceeds is compared with the SAR in the table below.

Table 1: Allocation of Proceeds

	<u>Category</u>	<u>SAR</u>	<u>Actual</u>
(1)	Civil works	27.00	20.83
(2)	Materials and equipment	12.00	5.56
(3)	Ready-mix concrete and asphaltic concrete	8.00	3.11
(4)	Consultants' services and overseas training	0.60	0.37
(5)	Fee	0.75	0.74
(6)	Unallocated	<u>1.65</u>	<u>-</u>
		50.00	30.61

Operation of the Market

10. SMG established the authority responsible for managing the market with the legal name of Seoul Agricultural and Marine Products Wholesale Market Management Corporation (SAMACO), instead of the Karag-dong Agricultural Market Authority (GAMA) as expected at appraisal. The Loan and Project Agreements were duly amended to reflect the new name. According to the 1985 Audit report and the PCR, SMG had to provide a subsidy of about W 4.3 billion (US\$5.4 million) to operate the market in 1985. Market revenues are less than expected at appraisal, mainly because the Government has chosen to defer until some future time the collection of fees for parking, freezer storage use, and rents for stores of jobbers, auxiliary jobbers, and authorized wholesale companies. It is not clear why SMG chooses to subsidize the market because it is fully utilized; temporary facilities have been set up in the parking area for retailers and auxiliary jobbers until additional buildings can be constructed to accommodate them. Daily throughput of the market, estimated in the SAR to be 3,570 tons of fruit, vegetables and fish is now estimated at 3,630 tons in the second year of operation.

Covenants

11. The one covenant which has not been fulfilled relates to generation of sufficient revenues from market rents; fees and other charges to cover the market's operating costs, depreciation and loan repayment. With this exception, all covenants were fulfilled. Progress reports were timely and informative; audit reports on the project were submitted without qualification. The establishment of the market authority and appointment

of staff were carried out according to the revised schedule, and the Yongsan market was closed and converted into an area for electronic wholesalers.

Bank Performance

12. The PCR implies that SMG was dissatisfied with the Bank's requirements for ICB (para 332 and 342) and its recommendations during project preparation that building designs be changed to more modern types. The Bank participated very actively in project preparation, including computerized mapping of the distribution system in Seoul. The long gestation period for the project with the numerous preparation and preappraisal missions were probably irksome to the Borrower, though they were just as much the result of indecision on Government's part as persistence on the part of the Bank. During project implementation, rapport was hindered by a lack of (fluent) English-speaking staff in SMG and a reluctance to share information on implementation difficulties with supervision missions.

Economic Rate of Return

13. The Staff Appraisal Report estimated the Economic Rate of Return to be 25%. The Project Completion Report (section VII) recommends recalculation of this estimate when the full impact of the market is known, but does not offer its own updated estimate. Pending such a full review, the following subjective order of magnitude estimates, permit an orderly downward revision of the earlier estimate, while still suggesting significant project benefits:

- (a) Spoilage reduction has been achieved, with about 20% less spoilage than the Yongsan Market, (20% of total benefits.)
- (b) There has been little improvement in vegetable quality, and almost no vegetables are being auctioned. There has, however, been some increase in competitiveness and though prices have risen this cannot meaningfully be separated from the primary inflationary effects. (Benefits here might be downgraded from 37% to 15% of total benefits.)
- (c) Reduction in transport delays has been fully achieved (10% of total benefits).
- (d) Savings from backhauls due to better information provided by the market has failed to materialize (from 10% to 0% of total benefits).
- (e) The projected electronics market at Yongsan has failed to achieve anywhere near full occupancy (from 9% to 0% of total benefits).

Applying this correction to the original estimate of 25%, and in the absence of major discrepancies the projection of real costs, would give an Economic Rate of Return of 13.5%.

Conclusions

14. The project has provided the physical infrastructure and the institutional framework designed to promote more competitive price formation mechanisms, increase the efficiency of the agricultural marketing system particularly in Seoul, and establish a basis for improving public policies and institutions affecting agricultural marketing. These were the objectives set out in the SAR and expected to be achieved by construction of the market, establishment of its management authority, and carrying out the marketing study. The PCR implies that the improvement of the marketing system has not been achieved as planned (para 225) but that it is proceeding in the right direction. A decade has passed since the Government approached the Bank for assistance in financing a marketing project. During that time, the Karag-dong Market has been conceived, planned and constructed; legislation has been passed to promote orderly and efficient marketing of agricultural produce; and plans are under way to establish similar markets in the other three quadrants of the city. The agricultural marketing system in Korea is proceeding toward modernization and the operation of Karag-dong is one of the first steps in this direction. The Loan was fully prepared on July 31, 1986.

PROJECT COMPLETION REPORT
ON
AGRICULTURAL WHOLESALE MARKETING SYSTEM
PART A
December 31, 1986

SEOUL METROPOLITAN GOVERNMENT

I. INTRODUCTION

The principal objective of the Garag-dong Agriculture & Fishery Wholesale Marketing Project (the Project) is to increase the efficiency of the agricultural marketing system throughout the country in general and in Seoul in particular.

In connection with the financing of the Project, the Government of the Republic of Korea (the Government) entered into a Loan Agreement (Loan No. 2111-KOR) on April 5, 1982 with the International Bank for Reconstruction and Development (IBRD). On April 5, 1982, the Government entered into a subsidiary loan agreement with the Seoul Metropolitan Government (SMG) to make the proceeds of the Loan available to SMG. Also, SMG entered into the Project Agreement on the same date with IBRD. The principal of the IBRD loan was \$31.3 million (originally \$49.5 million).

II. PREPARATION & APPRAISAL OF THE PROJECT

A. Origin

Special Circumstances (Background)

211-1 Protection of producers and consumers by improving marketing structure

- . Inducement of fair price formation by introducing an auction system.
- . Increasing the efficiency of distribution by maintaining sufficient market space and by having all the distribution-related facilities furnished with modern equipment.

211-2 A need arising from Seoul's leading role in price formation for agricultural & marine products.

- . The metropolitan area of Seoul covers 627 sq. km which is 0.6% of the entire country in land area with 24% of the total population of the nation.

- . Such cities as Seongnam, Anyang, Euijeongbu and Bucheon are located adjacent to Seoul.

Therefore, there is the merit of curtailing transportation costs by changing distribution channels and playing a leading role in price formation.

211-3 A place easy of access, located 15km south-east from the center of Seoul.

211-4 Other social benefits

Increase in employment, environmental improvement of the city, contribution to the residents' preservation of health by sanitary treatment of food.

- . Price stabilization and distribution cost curtailment by strengthening the distribution information function.
- . Such indirect benefit by alternative use of the Yongsan Market site.

212 It was agreed upon between the Government and SMG when the Loan Agreement was concluded between the Government and IBRD that SMG can use the loan proceeds for the Government's Agriculture & Fishery Wholesale Market Construction Project (1st Stage).

The preliminary study of the project was started by the Korea Development Institute (KDI), and from June 10th, 1978 to July 15th 1978, a task force team of the Food and Agriculture Organization (FAO) and IBRD came to Korea to assist in completing the plan of the Project.

The SMG settled its Long-term Agriculture & Fishery Wholesale Marketing Project Fundamental Plan by dividing the Seoul area into four

geographical divisions.

- 213 The original plan was to rearrange the shipping system and to promote the standardization of merchandise and packaging and to open up a large number of stores. However, such plan was abandoned because of the difficulty in reforming Korea's old trade practice and the mentality of the residents in the producers' areas.

The construction of a grain market within the Garag-dong Market was also considered but subsequently rejected due to traffic problems. Another location was selected as the site for a grain market.

B. Preparation, Appraisal, Negotiation and Approval

- 221 In August of 1977, according to its decision for the construction of an agriculture and fishery distribution center, the Government had the Agriculture & Fishery Distribution Structure Modernization Project reflected in the 5th Economic & Social Development Five-Year Plan, and the Ministry of Finance obtained a resolution of the Cabinet Council on March 5, 1982 to borrow 50 million dollars to finance the construction of the Garag-dong Market.

- 222 SMG established the Garag-dong Market Construction Fundamental Plan in April of 1980. Prior to this, KDI completed its study on the establishment of the Fundamental Plan. The Korea Rural Economics Institute (KREI) carried out its investigation to determine the appropriate market size, and FAO and IBRD assisted in concluding the Project Plan by dispatching a task force team.

IBRD suggested to play a construction consultant role but this was rejected because SMG's capability was deemed sufficient.

KDI's study for the Fundamental Plan and KREI's Market Size Study were reflected in the Fundamental Plan.

The size of the market did not alter from the original plan. But the grain market which was originally planned to be constructed within the Garag-dong Market was decided to be built near the Yangjaedong tollgate on account of traffic congestion in the Garag-dong area which had not been taken into consideration in the original plan.

The construction was originally planned to be completed by May of 1984, but was delayed until May of 1985. The separation of the grain market is considered realistic and the decision therefor was reached by a mutual agreement.

- 223 No details of the Agreement were violated except that the site of the slaughtering facilities was changed to the outskirts of the city on IBRD's suggestion.
- 224 The Project was carried out without any setbacks and there were no abnormal delays.
- 225 The improvement of the marketing system has not been achieved as planned because of the traditional trade concept of the Korean people at the present time. However, it seems to be proceeding in the right track by system improvement, revision of laws, education of the producers and merchants, and increased publicity. The original forecast and plan appear to be appropriate in view of successful results in the supply and distribution of goods, in easing the traffic, in the improvement of urban environment, and in the alternative land use of the Yongsan Market for an electronic complex.

C. Target and Goal

- 231 In April 1980, the Government set up its basic plan to construct a wholesale market in each of four geographical divisions of the city as part of its institutional market project for agricultural and marine products.

As the first step, the Garag-dong Market was constructed in the South-East. SMG is planning to build a market in the North-East (Sanggye Dong in Do Bong Gu) and in the South-West (Sin Jeng Dong in Gang Seo Gu) by 1991 and in the North-West (Eun Pyung Gu) thereafter. The Garag-dong Market, the first wholesale market built as part of the Government's Long-term Wholesale Market Construction Project, covers 50% of the city's consumption, and the city will utilize the experience gained in the operation of this market in the planning, construction and operation of the other markets.

The Government has established its plan to construct wholesale market in cities with a population of 300 thousand or more, and this plan is being currently implemented.

- 232 Although the over-all strength of the nation has increased substantially since the early seventies through industrialization in all sectors of the national economy, improved standards of living and changes in the general conditions of livelihood, the marketing of agricultural and marine products has remained undeveloped. In view of such phenomenon, the Government set up its project to construct institutional wholesale markets, which was given top priority of investment, and included it in the Fifth Five-Year Plan.

The population of Seoul is 24% of that of Korea and the prices of agricultural and marine products are determined largely in Seoul. Therefore, to apply the results of the operation of a newly established institutional market to the other such markets and to alleviate the concentration of the marketing function, the Government considered the following in the selection of the site for the Garag-dong market:

Garag-dong lies 15km south-east of business district of Seoul and 2.5km away from the new Jamsil area.

Garag-dong is near the South Ring Road, which is linked with the Keoyngbu Expressway, the main transportation route, and with Songpa Main Street connecting Seongnam City to Seoul.

233. Slaughtering facilities were originally planned to be constructed by SMG. However, the National Livestock Cooperatives Federation constructed these facilities and donated them to SMG.

D. Project Description

- 241 The construction of the Garag-dong Argicultural and Marine Products Wholesale Market (Project A)

Construction of:

- i) a fruit & vegetable market building (total floor space of 107,000 sq.m)
- ii) a fish market building (total floor space of 40,000 sq.m)
- iii) a related products market building (total floor space of 11,200 sq.m)
- iv) Freezer storage facilities
- v) an administration and market information center building (total floor space of 11,500 sq.m)
- vi) public utility facilities, including gas, electricity, water and communication facilities and garbage and solid waste treatment plants

- 242 The construction of about 3.5km of market-related roads, including an underpass, intramarket streets and parking facilities.

- 243 Establishment of the Seoul Agricultural and Marine Products Wholesale Market Management Corporation (SAMACO)

III. IMPLEMENTATION

A. Provisions of Loan Agreement and initial date of construction.

- 311 On April 5, 1982, an Agreement was entered into between the borrower and IBRD; additionally on April 13, 1982, the borrower and Han Yang

Co. finalized their construction contract.

In accordance with the Agreement, the borrower began making withdrawals from IBRD starting from Aug. 6, 1982.

312 As scheduled, piles were put in place and bid invitations were issued for the pricing of iron rods for international competitive bidding. However, no bids were received on initial call for bids; therefore, construction was delayed for three months.

313 Suggestions for amendment with regard to supplying of construction materials are either taking measures for receipt of the materials in advance of construction from the Office of Supply, or loosening of restrictions in the Loan Agreement.

B. Adjustment: Construction Costs.

321 The total estimated cost for the construction was W60,000 million and no budget overruns were occurred. The road network and parking facilities were constructed as originally planned, and all the other market facilities are being used as expected at time when the market plan was drawn up.

322 While there was no substantial change in the size and allocation of the funds used for this project, US\$12 million of the market construction costs was provided from domestic sources. A reserve fund for physical contingencies in the amount of US\$2 million and an allowance for expected price increase totalling US\$5 million were not needed. Therefore, the IBRD loan principal was reduced by an amount totalling US\$19 million.

C. Execution of Construction Works

331 As of May 30, 1984, the project completion date, only 82% of the works was completed due to the fact that the following factors were not taken into consideration:

- . Complexity of purchasing materials through the Korean Government Office of Supply.
- . Time intervals for large scale construction project.

332 Significant reasons for the delay

- . Failure to purchase materials (iron rods) on time.
It was mainly because the iron rods were purchased from an overseas market through international bidding.
- . An adjustment was made in structures of P.C. top light.
- . An adjustment was made in substituting mild-bar iron rods for high bar iron rods in the framing stage.
- . Other numerous minor adjustments.
- . Not allowing enough time interval between phases of construction.

D. Procurement

341 Method of procurement

- . Construction Works
On April 13, 1982, Han Yang Co. was selected as contractor among four prequalified bidders and a contract was concluded.
- . Procurement of Construction Materials
Iron rods, cement, electricity and machinery were purchased through international bidding while remicon and ascon were purchased via domestic competitive bidding.

342 Difficulties in procurement following Bank Group Guidelines

. International bidding

Excess documents were required which was time consuming and extra manpower was required, e.g. site managers were more involved in administrative work than in their responsibilities.

Failure to receive materials on time

. Domestic competitive bidding

Remicon and ascon were purchased through this method but it was difficult to bid because the Korean Government Office of Supply set the unit price of the materials at the beginning of the year. Therefore, SMG directly took charge of the bidding.

343 Iron rods were exempted from value-added tax (VAT) due to procurement through international bidding which resulted in the construction cost curtailment.

E. Projected Cost for Construction

351 When the proposal was presented, the suppliers of funds and the amounts to be supplied were as follows:

	<u>PLAN (millions)</u>
. IBRD	₩34,300 (\$50 million)
. Government	27,200
. SMG	<u>8,200</u>
Total	<u>₩69,700</u>

Amounts actually supplied were as follows:

	<u>ACTUAL (million)</u>
. IBRD	₩24,000
. Government	20,800
. SMG	<u>14,100</u>
Total	<u>₩58,900</u>

352 Reasons for lower cost

The expected inflation rate of 10% per year was higher than the actual figure; thus, the allowance for expected price increase was not needed and the market was constructed with lower costs.

F. Withdrawals of Loan Principal

361 Prior to June, 1983, larger amounts were disbursed than amounts to be withdrawn from the IBRD loan account per the original withdrawal schedule, owing to the fact that construction materials had to be procured earlier than expected.

By year-end 1985, however, only 61% of the total loan principal (US\$50 million), or US\$30.3 million, was withdrawn due to a three month delay in the construction process.

G. Evaluation of the Contractors & the Suppliers

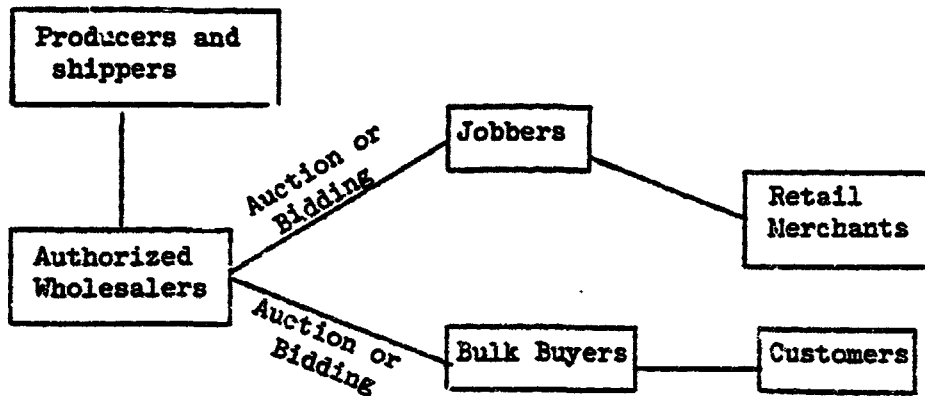
371 No significant problems or shortcomings arose in the performance of Han Yang Co., the contractor, and the suppliers.

IV. OPERATING PERFORMANCE

A. Description

411 The market consists of four main buildings and ten smaller ones on a 547,265 m² site, with a total floor space of 197,142 m², in which 8 authorized wholesale companies and 4,315 private traders from Yongsan, Jung Bu, Namsaemoon, Cheongryangri markets engage in the trade of agricultural and marine products. Per the past operating records, the daily throughput of the Garag-dong Market includes 2,654 tons of vegetables, 635 tons of fruit, and 340 tons of marine products.

411-1 Marketing Process



411-2 Major Functions

i) The Function of Gathering Goods (Authorized wholesalers)

8 authorized wholesale companies (5 for vegetable & 3 for marine products) sell agricultural or marine products to the jobbers through auction or bidding and collect a certain amount of commissions from the shippers or producers.

ii) The Pricing Function (Auctioneers)

Listed agricultural and marine products are consigned to the authorized wholesalers that in turn sell them to the jobbers or bulk buyers by auction or bidding

iii) The Distribution Function (Jobbers & Bulk buyers)

Jobbers buy the products through auction or bidding in the market and sell them to retailers and collect certain amount of commissions from the retailers.

Bulk Buyers handle transactions of products in the same way as the jobbers and sell the goods directly to the consumers. They are registered with SMG.

B. Salient Features

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i) Market Utilization (daily averages)

The number of customers - 100,000

The number of vehicles that enter into or exit from the Market:

Truck	13,000
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Automobiles	<u>10,500</u>
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	<u>23,500</u>
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ii) Fruit & Vegetable Market

The market complex consists of the fruit & vegetable market building, the truck sale building, entrance parking area, and exit parking area.

The four authorized wholesale companies and one of the National Agricultural Cooperative Federation's (NACF) public stores distribute the consigned fruit & vegetables via 1059 jobbers and 1719 auxiliary jobbers at the fruit & vegetable market building and truck sale building.

462 shops, each of which is used by 2 to 3 jobbers, are located in the two main buildings, and 1719 auxiliary jobbers handle the produce in the shops erected on the exit parking area on a temporary basis.

New buildings will be erected to accommodate the auxiliary jobbers and retailers. The retailer - market building will be remodeled to accommodate the vegetable jobbers' shops.

Currently existing lack of space for shops would be resolved in this manner.

iii) Fish Market

Two authorized wholesale companies and one of the public stores of National Federation of Fishery Cooperatives (NFFC) operate in the fish market.

The public store of NFFC and one authorized wholesale company deal with fresh fish, while the other wholesale company deal with dried fish. The fish market building consists of 206 stores; 2 jobbers are assigned to each of these stores.

As in the case of the fruit & vegetable market, 343 auxiliary jobbers work in the temporary facilities built on the exit parking area which will be replaced by a new building.

iv) Related Item and Retail Market Building

149 retailers handle items related to fruit and vegetables in 70 stores, while 71 retailers deal with fish related items in 31 stores.

Although 818 retailers originally applied for a store space in the retail market building, 567 retailers currently occupy the building. A new building which is to accommodate not only auxiliary jobbers but also resident retailers is expected to alleviate the shortage of stores in the fish market.

v) Freezer Storage

The freezer storage is being rented to and operated by a company with specialty in the area and supplies enough ice to the market.

Also, its storage function of marine products has been adequately performed.

vi) Administration and Service Building.

The Administration Building is being occupied by a banking branch of

NACF, a post office, SAMACO and the Office of Marketing Information.

The Service Building, which is being managed by an outside company, has barber shops, public bath facilities, restaurants, and lounges for market users.

vii) Utility Buildings

Solid and liquid waste treatment plants, as well as electricity, gas, communication and garbage disposal facilities are operated by SAMACO. No significant problems have thus far occurred in the operation of these facilities for the market.

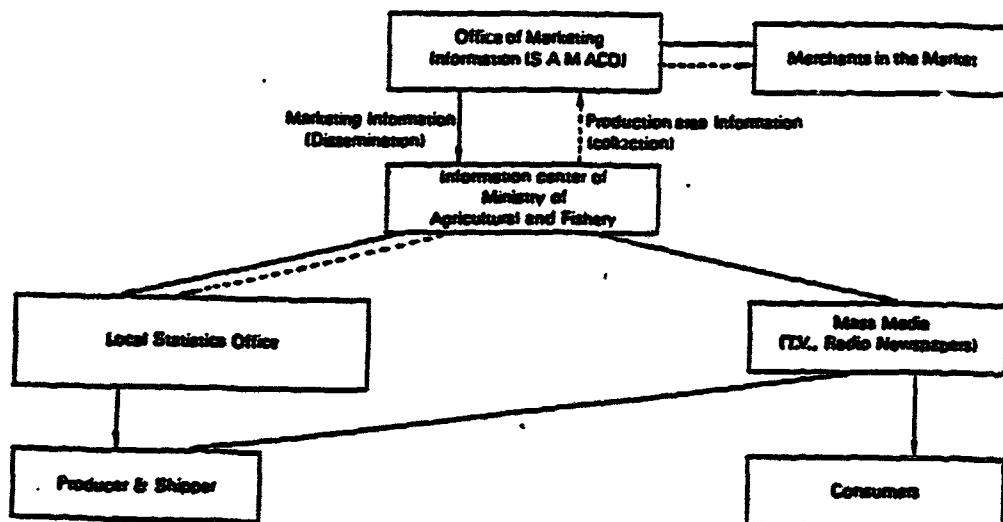
The gasoline station which is managed by an outside company, has provided vehicular fuel needs adequately.

viii) Despite partial occupation by the stores operated by auxiliary jobbers, the parking facilities have been sufficient to meet the needs of the market users.

The road network provides convenient linkage to the highways.

ix) Office of Marketing Information.

a) System:



b) Items: 250 (Fruit and Vegetables: 120)

(Marine Products: 130)

c) Media: In-market: Electric bulletin boards, Information TV sets,
and Printed materials

Nation-wide: TV, Radio, Newspaper, and
Automatic Response System

d) Contents: Market Information: Items, grades, dealing amounts,
and bidding prices

Production Area Information: Main production area,
planting area, and estimated
amount of shipment

x) Major Facilities

Total area: 547,265 sq.m

Total Floor space: 197,142 sq.m

<u>Facility</u>	<u>Area (m²)</u>	<u>Contents</u>
Fruit & Vegetable Market	106,859	1st floor: Auction areas, Jobbers' stalls (462) & Cold storage (0°c - 3°c) 2rd, 3rd floors: Restaurant, Offices
Fish Market	39,844	1st floor: Auction area, Jobbers' stalls (206) & Cold storate (-2°c - -5°c)
Meat Market	13,879	Meat processing plant storage, Entrails processing plant & Butcher shop
Truck Sale Area	3,840	Auction areas Parking area (up to 448 trucks)

<u>Facility</u>	<u>Area (m²)</u>	<u>Contents</u>
Fruit & vegetable Related Items Market	5,712	Packaging materials, Processed foods, Agricultural chemicals, etc. (70)
Marine products Related Items Market	2,565	Packaging materials, Canned goods, Fried marine products, Snack shops, etc. (31)
Freezer Storage	4,698	Freezer storage (-40°C), Cold storage (-20°C), Stored ice (100 tons), Ice manufacturing facility (20 tons per day)
Service Building	3,186	Public Bath, Restaurants, Lounges, Barber shops
Administration Building	11,635	1st floor: Bank, Post office, Gallery & Information Booth 2nd floor: Restaurants 3rd floor: Marketing Information Center 4th & 5th floor: Administrative offices
Gas Station	690	Gas Pumps (8), Oil storage (Capacity 200kl)
Parking Area	17,480	Capacity up to 4850 vehicles
Retail Store	5,718	Stores (818)

V. FINANCIAL PERFORMANCE

A. Financial Results

- 511 SAMACO's revenues are generated from market use fees (which are collected in proportion to trade performance), market rents, and interest accruing on security deposits.

These revenues are barely sufficient to cover SAMACO's operating costs and definitely insufficient to provide funds necessary to repay the principal of and interest on the IBRD loan.

On the other hand, collection of parking fees which may be collected from the users of large parking facilities and that of training fees of the merchants participating in the markets' training program have been deferred for the purpose of vitalization and institutionalization of the new market.

a. Market Fees

5/1000 of the transaction amounts is collected from the 6 authorized wholesale companies and the public stores of the National Agricultural Cooperative Federation (NACF) and National Federation of Fishery Cooperatives (NFFC) as market use fees.

These companies and public stores sell agricultural and marine products on consignment by the shippers and deduct their commission from the sales total within 60/1000 of the selling price. Market fees are included in these commissions.

The Market opened in June, 1985 and started to collect market fees from August 1, 1985. The market fee revenue was very low during the initial stage because of irregular trades which has been nearly eliminated thanks to more vigorous efforts made by market management starting from June, 1986.

The Market fees collected during the last one year amounted to 2,014 million Won and are expected to significantly increase in the future.

b. Market Rents

Part of the buildings or facilities are rented out to the merchants who do not directly take part in wholesale transactions. Rents are charged at the rate of 6/100 of the cost of the facilities which are rented for a one-year rental period.

At present, rental buildings include the retail market building, fruit related goods building, fishery related goods building, freezer storage service building and the gas station. Also, offices and restaurants on the 2nd and 3rd floors of fruit market and fish market buildings are leased out.

The rents collected for the year 1985 stood at 1,577 million Won. SAMACO has rented out 54,000 sq.m., or 28% of the total floor space of GAMA buildings.

c. Interest Income

The leasehold deposits received from the wholesalers and lessees amounted to 2,857 million Won. Interest accrued on these deposits totaled 385 million Won.

d. Other Items

Collection of parking fees, freezer storage use fees, training fees, office rents of authorized wholesale companies, and store rents of jobbers and auxiliary jobbers, has been deferred for the purpose of vitalization of the new market as a matter of policy.

B. Financial Rate of Return

521 New Estimate and Reasons for Deviation

a. New Estimate of Financial Rate of Return

In the forecast report, the rate of return was calculated on the basis of revenues that may be generated from two kinds of taxes and an individual sources related to the market operations.

VAT income will be nominal. The Government has exempted the authorized wholesale companies from taxes on their commission for wholesale agricultural and marine product transactions. It is expected that for the coming 3 years, taxes levied on the jobbers would be less than the taxes they paid when they were with the Yongsan Market or any other markets in which they operated prior to their move to the new market. None of the authorized wholesale companies has paid corporation tax to date.

Their settlement of accounts for the fiscal year 1985 showed that they sustained a loss. The magnitude of the merchants' income tax burden has not been studied; however, there is every indication that their tax burden did not increase due primarily to the Government's measure to have their VAT obligations reduced.

Parking and freezer storage use fees among the operating revenue sources have not been collected.

Every effort has been made to reduce the marketing costs for the producers and consumers by reducing tax burdens and market use fees and by promoting other measures for the vitalization of the institutionalized market.

In all, it appears difficult to determine rate of return as was done in the forecast report.

b. Reasons for Deviations from the Appraisal Estimate

Under the circumstances mentioned above, efforts had to be made for the vitalization of the market and for the reduction of marketing costs by having the Government reduce the tax burden of the market related people (authorized wholesale companies, jobbers, etc.) in response to their forceful demand from the very initial stage of the market's operation.

c. Other Covenant Provisions

Those matters agreed upon between SMG and SAMACO have been carried out to the satisfaction of the both parties.

C Financial Covenants (Contract 3.05 a - b)

As previously mentioned, SAMACO's revenues at present are sufficient to cover its operating costs, but not enough to cover depreciation and loan repayment.

Income sources will have to be expanded by raising market fees and rents, extension of rental facilities, and by introduction of related operations. However, these efforts are expected to come to fruition after 2 to 3 years of operation.

The IBRD loan was fully repaid as of July 31, 1986 to reduce our monetary burden.

We entered into contracts for a new commercial loan of US\$15 million with an annual interest of 9.19% and relatively lower exchange risk and for another of Sfr37 million at the annual interest rate of 6%.

These new loans are to be repaid by 1996.

531 There are no particular financial agreements between SMG and SAMACO. A municipal ordinance of SMG and the Articles of Incorporation of SAMACO, which are regulated by the Local Government - owned Public Corporation Law, provide that SAMACO submit its annual operational plan and budget to the Mayor of the City of Seoul and obtain his approval thereof.

The operational plan should follow the related policy line, and SMG attempts to share the financial burden of SAMACO in case where SAMACO finds it difficult to shoulder such burden for itself. Thus the operation of SAMACO has been successfully carried out.

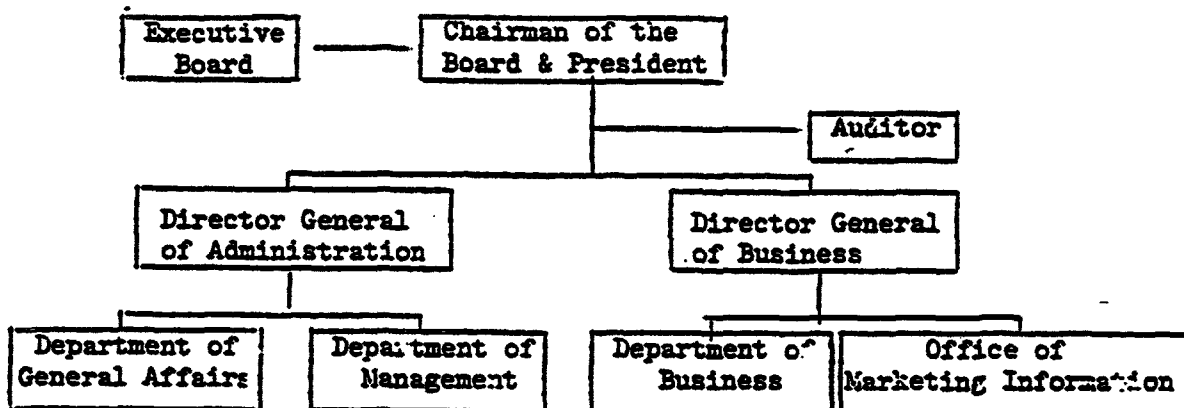
532 There have been no covenants which have not been observed since the opening of the Garag-dong Market.

533 In cases where the Mayor of the City of Seoul specifies the operational goal for SAMACO or makes a demand on the latter, practicability is always taken into consideration and positive support is accompanied in each of such cases.

VI. INSTITUTIONAL PERFORMANCE AND DEVELOPMENT

A. Management and Organizational Effectiveness

611 Organization Chart for SAMACO.



612 Quality of the Present Management

(1) Segregation of Duties

.Department of General Affairs:

Planning and budgeting, Education of merchants, Public information and external relations, Personnel administration, Accounting

.Department of Management:

Maintenance of market facilities, Improvement of the environment

.Department of Business:

Supervision and orientation for authorized wholesalers and merchants, Settlements of transactions

. Office of Marketing Information:

Collection, examination analysis and dissemination of marketing information, Electronic data processing and related functions

(2) Administration

. There is an Executive Board which is composed of 6 directors.

While the President, who is also the Chairman of the Executive Board, Director General of Administration, and Director General of Business serve on a full-time basis, Director General of the Bureau of Marketing in the Ministry of Agriculture and Fisheries, Director General of the Bureau of Industrial Economy in the Seoul Metropolitan Government and a representative of the merchants serve on the Executive Board as alternate executive directors. Each year, the Executive Board resolves on the business plan, budgeting and settlement of accounts, and submit them to the Mayor of the City of Seoul for approval. Issues relating to the company regulations, organization, staff size, and changes in property are handled in the same way.

The Auditor performs usual and periodic audit of accounting and administrative matters

. The employees of SAMACO are classified into six grades and technical staff: First Grade - heads of departments; Second Grade - heads of sections; Third Grade - chief clerks, and so on.

. The operation of each department is planned and carried out by business year. The results are analyzed for use as a feedback in the planning for subsequent years.

613 Deviations from the Appraisal Report

. The position of Vice President was not instituted for greater efficiency in operation and decision making.

- . For effectiveness of administration , one Director General controls general affairs and management while the other takes charge of supervision of merchants and transaction settlements as well as marketing information. Although emphasis is placed on the dissemination of marketing information, it seems somewhat too early to actively carry out merchant education programs.

614 Additional Functions Given Priority

It is one of the highly important functions of an institutionalized market to provide market information to producers and consumers. A 2Mb computer system is currently on a trial operation in an effort to provide prompt and sufficient information about transaction items, amounts, prices, extent of a harvest and so on by means of television, radio, newspaper auto-response telephones.

- 615 Changes for improvement is needed in all areas. A system most appropriate for the efficient and effective management of this market is being constantly sought, and there has been gradual improvement in this area.

B. Staffing and Development of the Administrative Personnel

- 621 There have been three stages in staffing:

- 1st - There were 54 staff members when SAMACO was established. Four training courses were provided to them by university professors with specialization in marketing.
- 2nd - During the preparation phase for market administration, 154 new staff members were selected by an examination and interview process.
- 3rd - During the market opening phase, 250 were recruited.

- 622 The employees are paid at about 160% of the pay level of the comparable ranking officials with SMG. They are making extraordinary efforts for the growth and improvement of the market.

VII. ECONOMIC REEVALUATION

It may be helpful for a future performance to analyze the economic effect of a new investment and evaluate whether the plan has been appropriate.

This project was our first business project. Techniques for analyzing economic effectiveness involving the objectives and methodology will be developed, and an economic analysis is expected to be performed within a few years.

VIII. BANK PERFORMANCE

811 Preparation of the Project Plan

In 1976, the Government and IBRD held discussions on measures to improve the marketing of agricultural and marine products. The government prepared a project plan report over the following two years and determined to construct a wholesale market which would have modern facilities in the vicinity of Seoul.

SMG held a conference with IBRD concerning a market construction plan in April, 1980, and started foundation and sewerage works on the market site in December of the same year. Prior to completion of the Project Plan in March 1981, IBRD had experienced specialists review and evaluate the designs and the functions of the facilities to be established. In the process, the IBRD specialists recommended that the building designs be changed to more modern types, and their recommendations were accepted in most part by SMG. In addition, they reviewed important changes in the design to assist the construction.

812 The size of the project, construction of the road network, and the timing of the construction, all of which were discussed with IBRD officials, were proved to be appropriate after the opening of

the market in view of market use by both the producers and consumers. The loan conditions are considered appropriate except that interest rate was higher as compared to other loans.

- 813 There were no critical errors in the activities of IBRD relating to the project formulation and evaluation. However, it was somewhat unreasonable to design the buildings with expectation that the trading practices would rapidly be adjusted to the modern designs when the design changes were made from conventional to modern types.

However, most of the difficulties relating to the new designs have been resolved because SMG accepted some of the suggestions made by the contractors and merchants in the process of construction of the market.

Table I Summary of Project Costs

	<u>In Won (1,000 million)</u>			<u>In US dollars</u>
	<u>Domestic</u>	<u>Foreign</u>	<u>Total</u>	<u>(millions)</u>
	<u>fund</u>	<u>fund</u>		
Supplied by Constructors:				
Roads and Utilities	3.8	2.5	6.3	5.0
Buildings	14.2	9.4	23.6	18.7
Mechanical	3.1	2.0	5.1	4.0
Electrical	2.3	1.6	3.9	3.1
	<u> </u>	<u> </u>	<u> </u>	<u> </u>
Sub-total	23.4	15.5	38.9	30.8
Supplied by Government:				
Roads and Utilities	1.9	2.2	4.1	3.3
Buildings	2.0	3.5	5.5	4.4
Mechanical	1.0	1.1	2.1	1.7
Electrical	2.6	0.3	2.9	2.3
	<u> </u>	<u> </u>	<u> </u>	<u> </u>
Sub-total	7.5	7.1	14.6	11.7
Technical Supervision	1.4	0.0	1.4	1.1
Organization Costs of SAIACO	1.5	0.0	1.5	1.2
Training and Consulting	0.1	0.1	0.2	0.1
	<u> </u>	<u> </u>	<u> </u>	<u> </u>
Total	33.9	22.7	56.6	44.9
Loan Commitment Fee	-	0.5	0.5	0.4
	<u> </u>	<u> </u>	<u> </u>	<u> </u>
Grand Total	33.9	23.2	57.1	45.3

Table II Revised Cost Estimate (as made by the Supervision Mission)

A. Construction and Installation

	<u>Quantity</u>	<u>Unit Price(W)</u>	<u>Amount (Won million)</u>
1. Roads and Utilities			
Temporary works	-	LS	530
Earthfill	420,000cu m	LS	528
Rockfill	182,700ton	LS	432
Paving Works	3,124a	LS	1,945
Reinforce	17,500m ³	LS	634
Add'l Sewage Treatment Plant	-	LS	304
Add'l Box Construction	-	LS	206
Add'l Sidewalk Pavement	-	LS	358
Landscaping	-	LS	612
Miscellaneous Works	-	LS	321
Installation Costs	-	LS	450
			<hr/> 6,320
2. Buildings			
Temporary Works	-	LS	980
Excavation	60,000cu m	750	45
Earthfill	70,300cu m	2,400	168
Backfill	12,000cu m	1,100	13
Stone pitching	34,000cu m	17,000	578
Pile Driving	6,550ea	14,500	95
Reinforced Concrete	-	LS	3,242
Prestressed Concrete	26,000cu m	190,000	4,940
Precast Concrete	30,000sq m	32,000	960
Plastering	210,000sq m	5,200	1,092
Waterproofing	-	LS	1,693
Tiles	11,000sq m	9,500	105
Doors and Windows	-	LS	1.848
Painting	-	LS	491
Finishing	-	LS	1,136
Add'l Work on Floors of Fruit & Vegetable & Fish Markets	-	LS	220
Add'l Waterproofing	-	LS	136

Table II (Continued)

	<u>Quantity</u>	<u>Unit Price (₩)</u>	<u>Amount (Won million)</u>
P.C. panel & Expansion			
Joint Supplement	-	LS	90
Miscellaneous Work	-	LS	2,545
V. A. T.			1,213
		LS	<u>2,010</u>
Installation Costs			23,600
			<u>25,610</u>

	<u>Amount (Won million)</u>	
3. Mechanical and Electrical Works	<u>Mechanical</u>	<u>Electrical</u>
Fruit and Vegetable Market	2,136	1,453
Fish Market	911	630
Administration Building	669	397
Service Building	200	48
Related Item Market	194	148
Freezer Storage	241	73
Retail Storage	23	40
Substation	32	91
Gas Station	78	14
Solid Waste Plant	6	1
Miscellaneous	<u>616</u>	<u>1,016</u>
	5,106	3,911

Table II (Continued)

B. Furnished Equipment and Materials.

	<u>Quantity</u>	<u>Unit Price (₩)</u>	<u>Amount (Won million)</u>
1. Roads and Utilities			
Cement	37,667bag	1,725	63
Accon	87,683 t	LS	2,098
Deformed Steel Bars	1,698 t	202,591	302
Remicon	14,852 m	36,291	497
Crushed Stone	325,785 t	LS	1,004
Hume Pipe	10,717 m	LS	44
• Piles	49	142,857	7
Miscellaneous materials		LS	85
2. Buildings			
Deformed Steel Bars	8,698 t	204,760	1,781
Stand Steel Bars	734 t	424,788	312
Cement	222,137bag	1,725	383
• Remicon	60,232 m	40,825	2,459
Hume Pipe	2,152 m	2,788	6
Cement Blocks	20,267 ea	296	6
Round Steel Bars	200 t	240,500	47
Concrete Piles	6,588 ea	73,000	481
Cement brick	1,430,000sheet		42
3. Mechanical			
Boilers	-	-	98
Air Conditioning Equipment	-	-	180
Steel Pipe	-	-	219
Waste Treatment Motors	-	-	x
HVAC Controls and Control Panel	-	-	125
Freezing Plant	-	-	235
Ice Making Plant	-	-	137
Condenser and Evaporator	-	-	604
Laneous Material	-	-	384
• Freight and Insurance	-	-	93
4. Electrical			
Display Board	-	-	666
Display Controls	-	-	141
Conduit Pipes	-	-	133
Power Panel and MCC	-	-	320
Transformers	-	-	118

Table II (Continued)

	<u>Quantity</u>	<u>Unit Price(W)</u>	<u>Amount (Won million)</u>
Power Cubicle	-	-	571
Cable Meters	-	-	110
Stand-by Generator	-	-	236
Lamps	-	-	41
Computer	-	-	118
Installations	-	-	258
Wire	-	-	184
Freight and Insurance	-	-	48

Table III Schedule of Withdrawals

<u>Fiscal year</u>	<u>Quarterly</u>	<u>In US dollars(million)</u>	
		<u>Estimate</u>	<u>Actual</u>
'82	3/4	0.75	0.75
	4/4	1.70	3.62
'83	1/4	4.60	7.49
	2/4	7.10	9.02
	3/4	12.00	11.72
	4/4	15.45	12.89
'84	1/4	20.40	14.81
	2/4	26.80	17.79
	3/4	32.20	20.31
	4/4	43.60	25.97
'85	1/4	46.50	28.96
	2/4	50.00	29.85
	3/4		30.14
	4/4		30.32

Table IV. Operating Results

	Square Measures of Land & Buildings		Daily through- put (ton)	Number of Wholesalers & Jobbers			Throughput (ton) per m ² of Floor Space
	Land (m ²)	Building (m ²)		Wholesale Companies	Jobbers	Auxiliary Jobbers	
Fruit & Vegetable Market	154,972	118,379	3,289	5	1,059	1,719	0.028
Fish Market	47,463	39,843	340	3	407	343	0.008
Total	202,435	158,222	3,629	8	1,466	2,062	

Table V

CASH RECEIPTS AND DISBURSEMENTS

(Million Won)

	1983	'84	'85	'86	'87	'88	'89	'90	'91	'92	'93	'94	'95	'96	'97-2006
Cash Receipts:															
Market use fee	-	-	594	2,014	2,407	2,407	2,407	2,407	2,407	2,407	2,407	2,407	2,407	2,407	2,407
Rents	-	-	847	1,330	2,025	2,025	2,025	2,025	2,025	2,025	2,025	2,025	2,025	2,025	2,025
Interest	-	-	255	385	130	130	130	130	130	130	130	130	130	130	130
Parking fee	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
training fee	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
subsidy	954	3,039	5,281	5,194	1,420	1,599	3,970	6,110	5,998	5,896	5,806	5,726	5,660	5,610	1,279
Leasehold deposits	-	-	2,857	-	-	-	-	-	-	-	-	-	-	-	-
Total	954	3,039	6,977	8,923	5,982	6,161	8,532	10,672	10,560	10,458	10,368	10,288	10,222	10,172	5,841
Cash disbursements:															
Operating expenses	-	804	2,325	3,439	3,586	3,765	3,954	4,151	4,359	4,577	4,806	5,046	5,298	5,563	5,841
Loan principal & interest	954	1,539	4,161	5,194	2,396	2,396	4,578	6,521	6,201	5,881	5,562	5,242	4,924	4,609	-
Interest	954	1,539	3,329	3,737	2,396	2,396	2,396	2,157	1,837	1,517	1,198	878	560	245	-
Principal	-	-	832	1,457	-	-	2,182	4,364	4,364	4,364	4,364	4,364	4,364	4,364	-
Income taxes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	954	2,043	6,486	8,633	5,982	6,161	8,532	10,672	10,560	10,458	10,368	10,288	10,222	10,172	5,841
Net	-	996	491	290	-	-	-	-	-	-	-	-	-	-	-

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**Completion Report
Korea
National Marketing Master Plan Study**

PART B

July 1986

Ministry of Agriculture and Fisheries, Korea

PROJECT COMPLETION REPORT
KOREA - AGRICULTURAL WHOLESALE MARKETING PROJECT
- PART B (NATIONAL MARKETING MASTER PLAN STUDY)

I. INTRODUCTION

Title; National Marketing Master Plan Study - Korea
Loan/Credit Number; 2111-Ko (Part B)
Amount of Loan Agreement; US\$500,000
Date of Loan Agreement; Apr. 5, 1982

II. PROJECT IDENTIFICATION, PREPARATION AND APPRAISAL

A. Origin

- o The fast urbanization and the rapidly increasing demand for better food due to rapidly increasing consumer income since 1960s required more investments and changes of marketing organization and method in Korea. In such circumstances, and IBRD appraisal team, who had examined the proposed first Urban Agricultural Wholesale Market Project in Seoul in November 1977, suggested to be Government of Korea (GOK) that a planning for a nationwide investments in urban wholesale markets was premature in the absence of certain basic data. A financial assistance was also suggested, in the form of an IBRD loan, for a national marketing master plan study (NMMPS) to collect and analyze such data and to prepare for a systematic investment

plan. Thereafter, a study was at first performed by Korea Development Institute (KDI) working staff in its report "Korea First Urban Wholesale Market Project", at July 1978.

o Roles of relevant parties for the NMMPS are follows:

- a) The World Bank supplies up to 50% of total expenditures and monitors the project to be implemented properly in accordance with the loan agreement.**
- b) Ministry of Agriculture and Fisheries (MAF) makes the necessary arrangements for timely execution of the studies, such as employing consultants to carry out the research work, paying consultancy fee, monitoring the progress of the research work, making suggestions relevant to their successful execution as necessary, and maintaining records and procedures of the project.**
- c) Consultants**
 - Korea Rural Economics Institute (KREI) has an overall responsibilities for the implementation of the research work as a leading consultant. It also employs domestic consultants, consults to MAF for employing foreign consultants, and maintains records and procedures of the project.**
 - Experience Incorporated, Co., the selected foreign consultant team, carries out the research work in the field of developing an optimum transshipment model, food storage and processing, and analysis of the marketing information system.**

- o NFFC and AFDC were considered improper to carry out research work efficiently in cooperation with KREI, mainly due to their organizational characteristics as one of active marketing institutes. But NACF which possesses proper researchers took parts in the project as a domestic consultant in the field of marketing in producing areas.

B. Preparation, Appraisal, Negotiation and Approval

- o The KDI working staff originally prepared the project in July 1978, in response to the suggestion of an IBRD appraisal team which visited Korea in November 1977 to review the First Urban Wholesale Market Project. Among the team member, an FAO/UNDP staff suggested the NMPS at first in Korea. After that, the original project program was revised by the IBRD mission (mission leader, B. Bermann and H.J. Mittendorf, FAO Senior Marketing Economist) in cooperation with MAF and KREI in September 1978, by KREI in October 1980, and finally by an IBRD consultant (Dr. Harrison) in cooperation with KREI in December 1981. In the course of the project preparation, many World Bank missions and staffs suggested the coverages and methodologies of the studies and took directly parts in the formulation of the project. Many Korean governmental staffs also assisted to prepare the project program and to collect necessary data.

- o The significant changes of the final project program which was prepared by Dr. Harrison and KREI from the original one which was prepared by KDI working staff are follows:
- a) Project costs were reduced from US\$2,120 thousand to US\$1,000 thousand.
 - b) More detailed program was suggested in the final one.
 - c) Flowers were added to commodities under consideration.
 - d) Most consultants for research were substituted to domestic personnels from expatriate ones, excepting agricultural marketing economist, cold storage expert, and marketing information expert.
 - e) Feasibility studies of the agricultural market improvement project proposed for 1982-1986 Development Plan, which was included in the Staff Appraisal Report, were not to be performed mainly due to loss of timeliness by the delay of project contract.

The changes were, even so reporter's personal opinions, due to changes of environmental circumstances and recognitions of the project, changes of responsible personnels in both of Korean Government and the Bank during negotiation and approval, and delay of negotiation approval and contract with consultants for research. However, the Bank and the Borrower readily agreed on them without any manner imposed. In retrospect, it's hard at present to judge its beneficial. But we think it was one of the best choices at the situations.

- o The covenants included in the loan agreement were exactly observed without any reservation and rejection.
- o But project implementation was delayed at least a half year due to the differences of opinion between the Bank staffs and Korean Government staffs. The most serious phase was to adjust the range of participations of expatriate consultants for research and timely supply of due domestic fund. There were unclear understandings of the governmental staffs on the procedures of expatriate consultants employment and its terms of reference.
- o As for appointment of consultants, we at first expected to employ Dr. Harrison, who was consultant of the Bank for this project and prepared the final project program, as an expatriate consultant because we thought he had considerable understanding and experiences on this kind of projects in Latin America. But this opinion was rejected by the Bank due to the qualificatory restriction in terms of reference for the employment of the expatriate consultants. The Bank also strongly requested to include NACF in the domestic consultants in spite of our hesitation considering the difficulties in coordination among consultants. As results, NACF took parts in the field of marketing in producing areas.

C. Targets and Goals

- o Government's long-term development program for agricultural markets

is to transform dominant quasi-wholesale markets to legal wholesale markets through the construction of comprehensive agricultural markets in cities nationwide and to link these markets as national system for the purpose of increasing marketing and pricing efficiencies. In the comprehensive wholesale markets, transaction method will be changed from consignment-sale dominate to auction sale for pricing efficiency. The Garag-dong market is the first one and a pilot project for the national market system improvement.

D. Project Description

This project is a study of Korean agricultural marketing system, including feasibility studies of various components of the agricultural marketing improvement program as a part of the Government's Five-Year Economic Development Plan (1982-86). But feasibility studies of the program of that period were excluded in implementation stage as mentioned above.

III. IMPLEMENTATION

A. Effectiveness and Start-up

- o The conditions of effectiveness for this project were employment of consultant and making contract with competent consultants.**

- o We expected to start the project before 1982 originally and to contract with consultants by the first half of the year. But the project set formally in implementation in July 1983 under the contract approved by the Bank, even if we had launched the project in September 1982 under a provisional contract with a domestic consultant (KREI) without official approval from the Bank.
- o Some misunderstandings of the recommendations and regulations imposed by the Bank and its staffs were the important causes to delay the employment of expatriate consultants and the contract agreement.
- o The selection and employment of the expatriate consultants in accordance with the terms of references tightly imposed by the Bank were difficult at the start-up period for the project progressors who had not experienced in employing foreign consultants according to the terms imposed by international institute such as the Bank and were familiar only with contracting procedures in local project. We think the delay of start-up made the consultants haste with time schedule and pressed to induce some hasty results without sufficient review of collected data. We also consider the regulations so tightly imposed were the important cause of delay and influenced on the quality of the project significantly. Therefore, our opinions are that more emphasis had to be given to the results of project than procedures in the case of such a research project to avoid loss of time.

B. Revisions

- o The important changes made after effectiveness were the reduction of project fund from the original 732 million won (1 million US\$ equivalence) to 442 million won, the exclusion of grains out of the commodities under consideration in scope of research, and some reduction of consultants employment periods.**
- o The reduction of project fund caused from the restrictions on the supply of local portion of the project cost. The reduced project fund makes it inevitable to restrict the scope of research. But we at first thought to perform all the scopes of project, as possible as we can, through the intensive contribution of the consultants and proportional reduction of the due durations of the consultants. We, however, eventually excluded grains from the commodities under consideration, considering great dependabilities of the grain market on government policies and uncertainties of the government grain policies at that time. Major portion of grain markets, especially rice market which is the most important crop in Korea, is under the direct control of the government and the government at the time took the most portion of governmental rice procurement and control over the farmer's cooperatives or private sector. Important changes of government policies can make some research results useless.**
- o Changes mentioned above implicitly informed the Bank staffs who visited Korea without any positive rejections.**

C. Implementation

- o After effectiveness, there was no any important delay of schedule even if there might be a little gap with the original in the progress of research by the consultants.

D. Procurement

- o No procurement was concerned with the project.

E. Costs

- o A breakdown of actual and estimated project costs is as follows:

(in thous. US\$)					
Year	Fund Source	Appraisal Report ^{1/}	Original Contract ^{2/}	Adjusted Budget ^{3/}	Actual Expenditure
1982	Domestic	55	109	45	45
	Foreign	55	-	-	-
	Total	110	109	45	45
1983	Domestic	200	195	120	120
	Foreign	200	204	143	143
	Total	400	399	263	263
1984	Domestic	245	196	137	127
	Foreign	245	296	157	144
	Total	490	492	294	271
Total	Domestic	500	500	302	292
	Foreign	500	500	300	287
	Total	1,000	1,000	602	579

Note: * Constant exchange rate of W732 for one US\$ applied throughout the project period. Exchange rate did not really affect the expenditure because all of the foreign costs were directly paid to consultants on dollar basis.

- 1/ The Bank mission Dr. Harrison's estimation in Dec. 1982.
- 2/ Contract with leading consultant KREI.
- 3/ The budget adjusted by MAF in 1984.

- o The most important cause of cost reduction was the restriction on the supply of local source of fund.

F. Disbursements

- o Source of funds of the actual expenditure are about US\$292 thousand from the Government and about US\$287 thousand from the Bank loan in total.
- o Expenditures by the major categories are as follows:

(in thous. US\$)		
Categories	Appraisal Report ^{1/}	Actual Expenditure
o Remuneration for domestic cons.	295.8	221.2
o Remuneration for foreign cons.	247.6	142.5
o Overseas trip	130.0	81.3
o Local trip & field survey	117.9	102.9
o Printings	12.5	31.8
o Computer use	32.0	22.4
o Office equipment & supplies	22.1	3.3
o Communication & transportation	96.1	10.7
o Conference	3.0	3.9
o Contingency	43.0	11.7
o Total	1,000.0	578.9

Note: * Expenditures from domestic sources were converted to US\$ equivalence, using the rate of W732 for one US\$ constantly and rounded.

1/ Dr. Harrison's estimation.

G. Performance

- o The consultants made their bests to draw the best results in short period. But the project was too enormous to complete within over 2 years with restrictive data and budgets. About the results, we satisfy the conclusive results even if there are a few shortcomings in coordinating the proposed projects among sub-sectors.**
- o The Bank mission strongly suggested to recruit the NACF staffs in the project in the fields of agricultural marketing in producing areas and others. But it seems that too many institutions involved in a single research project without orderly control device could make the team leader be difficult to coordinate the various opinions from diverse consultants**

IV. OPERATING PERFORMANCE

- o On completing the project in Dec. 1984, we collected various opinions from working-level staffs and managers of the institutions concerned and from professors through meetings and conferences. According to the suggested opinions, the KREI prepared a Korean version of complementary report in July 1985. We are now collecting opinions and improvement programs from local government mainly on the construction of comprehensive agricultural wholesale markets and are reviewing the research results and the opinions suggested by various persons for the establishment of a detailed implementation program for the improvement of the national agricultural marketing system.**

**V. FINANCIAL PERFORMANCE, INSTITUTIONAL PERFORMANCE AND DEVELOPMENT,
AND ECONOMIC REEVALUATION**

- o No relevant items for NMPS.

VI. BANK PERFORMANCE

A. Project Justification and Objectives

- o The Bank's suggestion on the need of this project in 1978 and its loan conditions were appropriate in retrospect at the time. There was also no any important event reinforcing the validity of original emphasis.

B. Project Control and Scheduling

- o The contents of project were appropriate except a little tight time scheduling.

C. Project Implementation and Operating Outcomes

- o The Bank's preagreement requirements and modifications were a little excessive. Many years had taken to start-up and to complete the project after it was at first proposed in 1978, in spite of its urgent need in Korea. During the time, many persons of the Bank and MAF had involved and changed in the project and suggested various opinions. The delay might have brought discouragement of the governmental staffs concerned towards the project, which was followed by decreased supply of local funds and perhaps quali-

tive degrading of the research. Delay of the original time schedule might be caused by the complicated loan agreement procedure which was signed on April 5, 1982 and by many times of changes in contents of the project without objectives change and decisive improvement.

- o The Bank's assessment of the domestic consultant's implementation capacity seems to be a little underestimated at preparation stage. The Bank's staff suggested to employ expatriate consultants exceeding our requirement considered. We had thought it would take fairly long time for expatriate consultants to understand even the prevailing practices in the Korean agricultural marketing system. At present, we think in retrospect the employment of all consultants from a single institute which can orderly be controlled by a team leader would be more efficient in implementation and coordination among sub-sectors for such a large research project.
- o Bank supervision and working relationship for the project were adequate and fair.
- o The Bank made its most significant contribution to the project at maybe the project formulation stage.

VII. CONCLUSIONS

- o The results of research is fairly exact and successful and will mark a milestone in the progress of Korean agricultural marketing. The result will also be a good guideline for the Government to

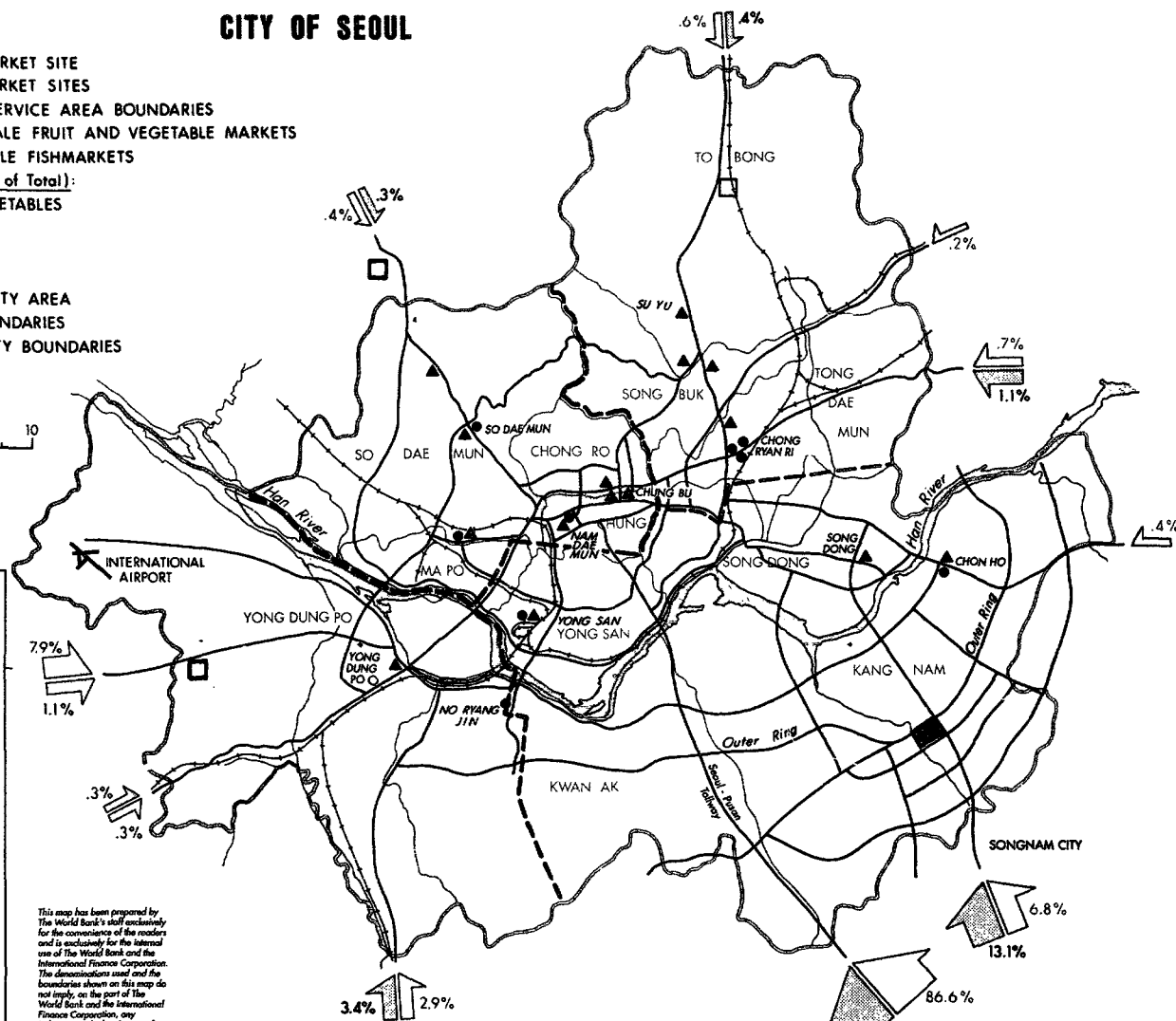
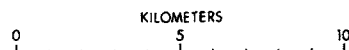
establish programs for the improvement of agricultural marketing system in the future. But some continuative^{..} reviews and modifications and collection of various opinions from diverse level of persons concerned for concensus will be needed in the future for the result to be a realizable action programs.*

MAP SECTION

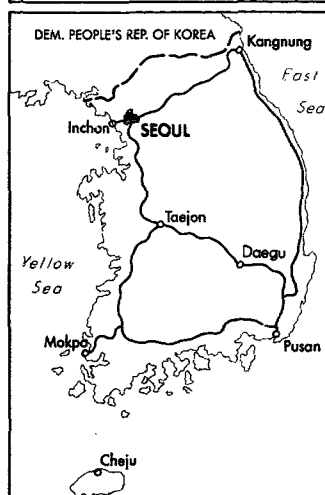
AGRICULTURAL WHOLESALE MARKETING PROJECT

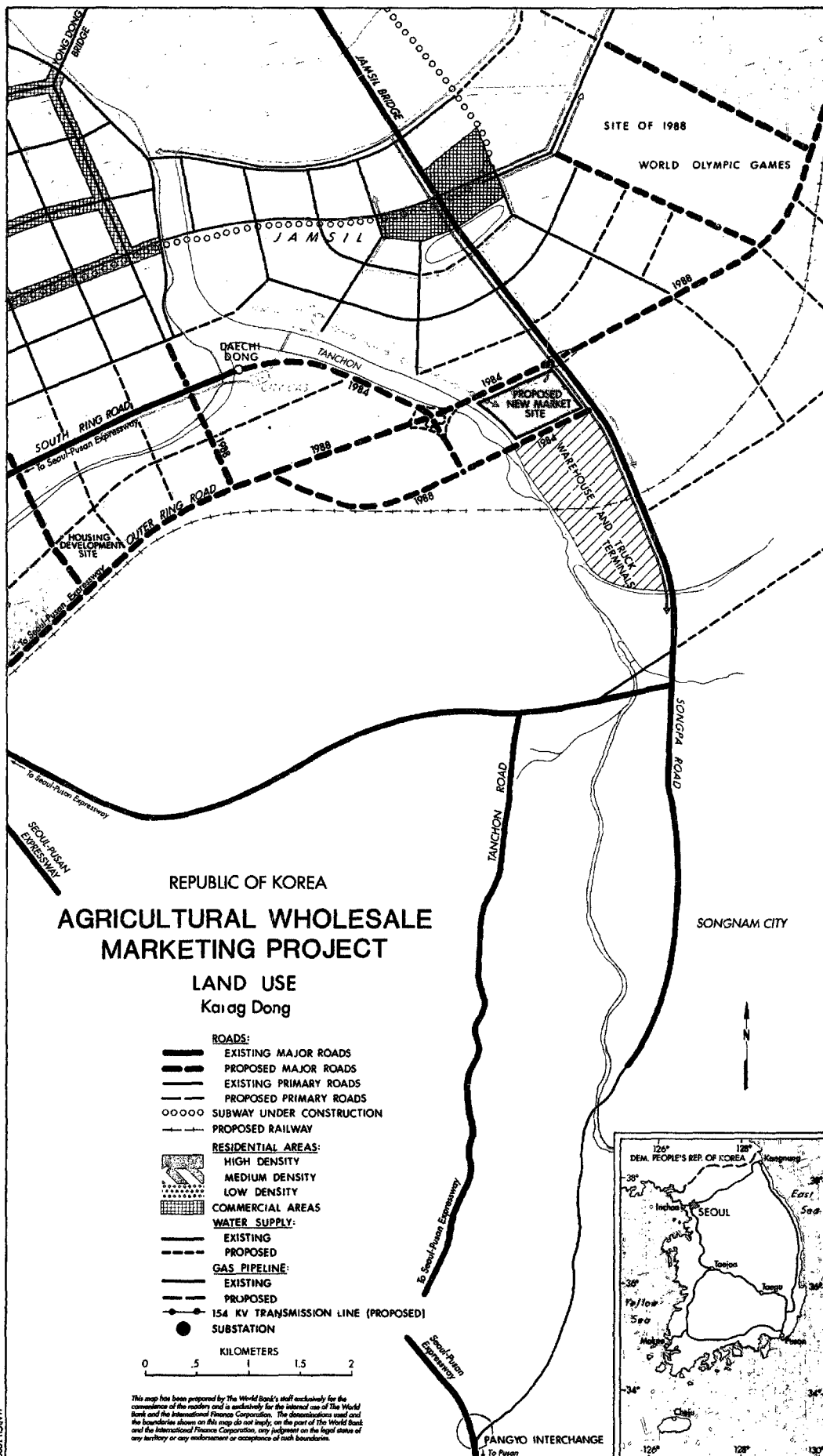
CITY OF SEOUL

- PROPOSED NEW MARKET SITE
- OTHER FUTURE MARKET SITES
- - - FUTURE MARKET SERVICE AREA BOUNDARIES
- ▲ EXISTING WHOLESALE FRUIT AND VEGETABLE MARKETS
- EXISTING WHOLESALE FISHMARKETS
- SUPPLY ROUTES (% of Total):
- ← FRUIT AND VEGETABLES
- ← FISH
- PRIMARY ROADS
- RAILWAYS
- CENTRAL SEOUL CITY AREA
- GU (DISTRICT) BOUNDARIES
- SEOUL SPECIAL CITY BOUNDARIES



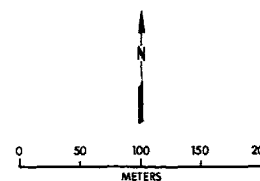
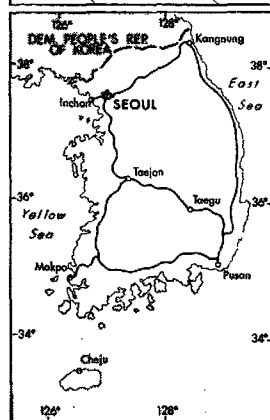
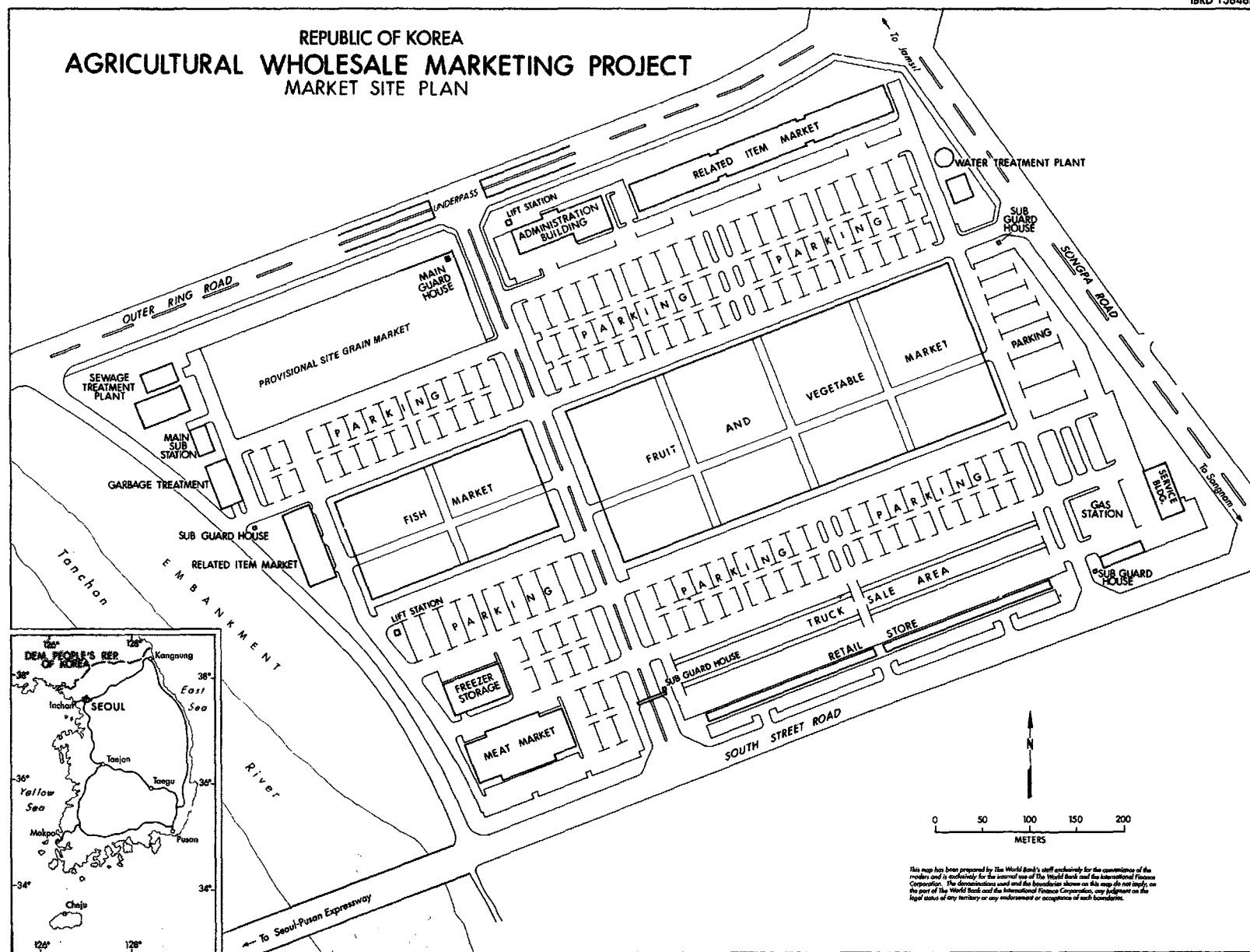
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REPUBLIC OF KOREA AGRICULTURAL WHOLESALE MARKETING PROJECT MARKET SITE PLAN



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